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The report of a survey whose mission was to study the need for a 4-year State-supported college in the Grand Rapids (Michigan) area. The report analyses economic, population, and enrollment trends and local demands for higher education. The findings include recommendations on the type of institution needed, the nature of the curriculum and instructional program, and the nature and extent of the physical plant for such a college. Includes financial implications of such a plan, including immediate and long-term needs.

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The Report to the Legislative and Citizens Committees
on the Eight-County Study of Higher Education
Needs in Allegan, Barry, Ionia, Kent,
Montcalm, Muskegon, Newaygo and
Ottawa Counties
December 1959

ED000097

A NEW COLLEGE

A Report to the Legislative and Citizens Committees on the
Eight-County Study of Higher Education Needs
in Allegan, Barry, Ionia, Kent, Montcalm,
Muskegon, Newaygo, and Ottawa Counties

by

John X. Jamrich
Director of the Survey

Center for the Study of Higher Education
Michigan State University
East Lansing, Michigan
December 1959

December 28, 1959

The Honorable Thomas J. Whinery
House of Representatives
Capitol Building
Lansing, Michigan

Mr. L. William Seidman
Peoples National Bank Building
Grand Rapids, Michigan

Gentlemen:

House Concurrent Resolution No. 28 of the 1959 Michigan Legislature created a Legislative Committee "to further study the need for a four-year, state-supported college in the Grand Rapids area, to provide plans for its establishment, to create a citizens advisory committee to assist, and to report its findings and recommendations to the 1960 Legislature."

This report, on the higher education needs of the eight-county area, was prepared in accordance with the conditions of my appointment as Director of the Study. The data of the survey clearly indicate the need for additional higher education facilities in the eight-county area. The provision of these area needs will require the understanding and support of the members of the Legislature and the citizens of the area and the state.

Sincerely yours,

John X. Jamrich

John X. Jamrich
Director of the Survey

LEGISLATIVE AND CITIZENS COMMITTEES TO STUDY THE NEED FOR A FOUR-YEAR, STATE-SUPPORTED COLLEGE

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- Garland B. Lane

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CHAPTER I

INTRODUCTION

Since the founding of our earliest colleges in this country, higher education in the United States has clearly reflected the changing needs of our society. This response to our social needs has fostered a keen concern on the part of the American public for the general welfare of higher education, a continuing concern that our faith in its values should always be fulfilled. This concern for the provision of educational opportunity to the largest possible proportions of our population has been particularly manifest within the past century. The results of this concern are visible in the rapid growth and extension of colleges and universities during this period. Along with this has come a continuing increase in the percentage of our youth who are attending our colleges and universities. Data, for selected years, for the nation and the state of Michigan, will illustrate the rapid rise which has been taking place in the percentage of college-age youth actually attending institutions of higher education in the United States and in Michigan (Table 1).

Table 1 presents data on the number of college-age youth, college enrollees, and the percent that the college enrollments were of the college age. The data are for the United States and for the state of Michigan. It should be noted that during the span of years, 1939-57, there was only a slight decline in the percentage of youth attending for the country as a whole, and no decline in the percentage of college-age youth attending in the state of Michigan.

Table 1. College-Age Youth and College Enrollments in the United States and Michigan.

	United States			State of Michigan (1)		
Year	No. of College-Age Youth	No. Enrolled in Colleges & Universities	Per Cent Enrolled	No. of College-Age Youth	No. Enrolled In Colleges & Universities	Per Cent Enrolled
1889-1890	5,156,447	156,756	3.04	n.a.		
1919-20	7,452,000	597,857	8.02	n.a.		
1929-30	9,034,000	1,100,737	12.18	n.a.		
1939-40	9,681,000	1,493,203	15.42	331,588	52,151	15.7
1949-50	8,948,000	2,456,841	27.46	362,680	101,390	28.0
1953-54	8,492,000	2,250,701	26.50	316,655	99,132	31.3
1955-56	8,774,000	2,678,623	30.05	329,135	119,833	36.4
1956-57				341,355	134,604	39.4

(1) John Dale Russell, Preliminary Report to the Michigan Legislative Study Committee on Higher Education Lansing, Michigan. March, 1957. p.49.

n.a. Data not available.

The table, then, underscores two important aspects of the growth and development of higher education: (1) the general increases in college-age youth, and (2) the continuing sharp increase in the percentage that college-age youth are of the enrollments in institutions of higher education. One other point should be noted, namely, that the percentage of college-age youth enrolling in institutions of higher education appears to have risen more rapidly in the state of Michigan than in the country as a whole.

As dramatic as some of these numerical data regarding the development of higher education may be, they are only indicative of the complex of problems which are facing and will continue to face higher education and the public in the nation and in the state of Michigan. For, accompanying the numerical increases then must be commitments and decisions regarding the financing of these expanding facilities; and decisions must be made regarding the types of program and curricular expansions which should be made in order to serve the increasing numbers. Certainly, these youth must be served with programs which are appropriate to their interests and capabilities, and which are in keeping with the economic, technical, and social needs of our society.

Whatever the problems, one thing appears to be evolving in public philosophy regarding higher education, namely, that such education brings with it generalized social values, and should, therefore, be supported to the largest possible degree by all of society. A corollary of this general maxim is that the opportunity for post-high school education should not be restricted either by economic or social levels of individuals seeking such education.

This concern for providing higher educational opportunity for the maximum number of our youth, and to make such educational programs and curricula commensurate with individual abilities and interests, bring with them the complex problems of planning and providing for these services on the national, state, and local level.

Although recent years have demonstrated increasing concern regarding higher education at the national level, the present structure of our higher education in the United States calls for provision and planning at the state and local levels, both through public and private channels. National studies and projections of educational needs, as essential and useful as they are, provide only the broad base for state and local analyses, planning, and action. This is one fundamental reason for the present study of higher education needs in a specific area of the state of Michigan.

In the illustrations presented by Table 1, it was pointed out that the national figures indicate overall increases in the population of the country; they indicate sharp increases in the numbers of college-age youth during the next several decades. Also, studies indicate different rates of increase for certain parts of the country and in certain states. Hence, it is important to have population and college enrollment projections made for individual states and for specific areas in the states.

For example, the recent Legislative Survey of Higher Education in Michigan provided college-age and enrollment projections for the state. The Survey also identified certain specific areas of the state in which more detailed analyses ought to be carried out in order to clarify the specific nature of the needs there.

Thus, in the Wayne county area, the Survey saw the clear need for several additional community colleges. The precise number of such institutions and the exact location of them, it was recommended, should be determined through further study of the area. Such a study is now being conducted under the direction of Dr. Gerald Boicort by Wayne State University.

The Legislative Survey also identified at least two other areas in which further study would be justified. The Director of the Survey, Dr. John Dale Russell, stated in his final report to the Legislature that "a superficial review of the situation leads to the conclusion that the most likely location for another state-controlled college is Grand Rapids. Grand Rapids is sufficiently distant from other state institutions, so there would be no objectionable overlapping of services in the new area if a new state college were located there."[1] Two specific steps remained before the above statement could be followed by action leading to the establishment of a state college in that area. In the first place, a detailed analysis was made of the area to estimate the population characteristics which can be anticipated in the future, and also a study of the nature of the educational needs which should be met by a new college, if the need for one were established. That is, some prior determinations should be made as to the curriculum and program of such a college which would best serve the needs of this area.

---

[1] John Dale Russell, Final Report of the Survey of Higher Education in Michigan. Lansing, Michigan, September, 1958. p. 141

Even prior to the Legislative Survey of Higher Education putting forth the suggestion that the Grand Rapids area might well be the most logical location for a new state college in Michigan, this area had manifested its concern regarding increasing population and the concurrent needs for additional higher educational facilities which were quite likely in the next decade or two. The report of the Survey served well to stimulate more vigorous activity and interest in studying the problem in greater detail.

For some time, an informal group of citizens had been meeting and discussing the problems of providing adequately for the higher educational needs of the young people in this area. With the passage of House Concurrent Resolution No. 28 of the 1959 Michigan Legislature, a committee of legislators was appointed to function with a Citizens Committee in the further study of the problem. It was decided that a more detailed study would be carried on for the consideration of these two committees and for final presentation to the 1960 Legislature. The financial support for this study has been provided by the Grand Rapids Foundation.

The Legislative Committee appointed Dr. John X. Jamrich as the Director of the Study. The Study was to be conducted through the Center for the Study of Higher Education at Michigan State University. Several members of the Center staff assisted with the Study. *

Mr. William Monohan served as the Assistant for Research on the project. Also utilized were the services of Mr. Donald Fink of the Grand Rapids Public Schools; Dean John E. Visser of the Grand Rapids Junior College; Dr. Algo Henderson of the University of Michigan, Center for the Study of Higher Education; the staff of the Grand Rapids Junior Chamber of Commerce; the

---

* The Director also wishes to acknowledge the helpful assistance of the staff of the Michigan State University Bureau of Educational Research, and especially that of Mrs. Kay Nash who, with Mrs. Elaine Frank, had full responsibility for the typing of the report.

staff of the Department of Public Instruction; Dr. John F. Thaden of the Community Development Center at Michigan State University; Dr. Eli P. Cox who furnished materials published by the Bureau of Business and Economic Research at Michigan State University, and materials published by the Michigan Department of Health. In particular, the Director wishes to acknowledge the helpful counsel of Dr. Floyd Reeves and Dr. Ernest Melby of the Center for the Study of Higher Education at Michigan State University.

The Problem of the Study

The various concerns which have been mentioned above -- the Citizen Committee, the Legislative Committee, the recommendations of the Michigan Survey of Higher Education -- all have focused attention, in one way or another, upon several basic questions and problems related to higher education needs in Kent and surrounding counties. Data and information regarding these questions appears to be essential in any systematic planning which might be undertaken to meet adequately the higher education needs of this area.

It was the purpose of this study to gather and analyze certain data which would provide a basis for dealing with the following broad questions:

1. Do currently available data on population and school enrollments, and such projections as can be made regarding future population trends and the desires of college-age youth to attend college give indication of the need for the establishment of a four-year, degree granting institution in this area?
2. If the need for such an institution can be established, what should be the nature of the curriculum and instructional program

to most adequately meet the needs of youth from this portion of the state?

3. Similarly, what should be the nature and extent of the physical plant for such a college?
4. For maximum service to the youths and adults of the area, where should such an institution be located?
5. Finally, what are the financial implications of such a plan, including both immediate and long-term needs?

The Area To Be Studied

At the outset, the main focus of concern regarding the area to be studied centered around the city of Grand Rapids. This was probably a natural outcome of the local concerns as well as the suggestions made in the Legislative Survey.

In the very early stages of planning the study, it became quite apparent that a much broader geographical area was and should be involved. Although some of these factors will be discussed in greater detail later, it may be well to mention one or two of them at this point. In the first place, when thought is given to higher education needs of an area, it is more realistic to think in terms of more than one city or even one county. Numerous studies of the geographic origins of college students indicate that, in the main, college enrollments come from within a 50 to 100 mile radius of the institutions. The notable exceptions, of course, would be in the case of particular professional schools such as law and medicine.

In the second place, the study of geographic origins of college students in Michigan, which was made by the Legislative Survey, indicated that several of the counties in this region of the state were particularly low in the percentage of college-age youth who were attending college. Again, these low-percentage counties are those in which there is no private or public institution of higher education. Thus, one is lead to the conclusion that a better geographical distribution of higher educational opportunity might prove to be of considerable benefit to these particular counties.

Third, although the most significant population increases will undoubtedly take place in the metropolitan areas such as Grand Rapids, studies of population increases in the state of Michigan indicate that this entire area of the state will certainly be affected by economic and population growth.

Thus, in order to include a larger portion of this part of the state, it was decided to include in the study Kent county and the seven counties directly adjacent to it. This includes Muskegon, Newaygo, Montcalm, Ionia, Barry, Allegan, and Ottawa counties (See Figure 1).

The Rationale of the Study

In order to provide a sufficiently broad basis for identifying trends and future needs, a variety of data was gathered and analyzed. The population, economic, and industrial characteristics of the area are, of course, of considerable importance in deriving results regarding the extent of the need. Certainly, the needs of local area business and industry may well influence certain aspects of program planning for a new institution. Upon the broad base provided by general population data and business activity, the specific school enrollments and school census data can be used as the

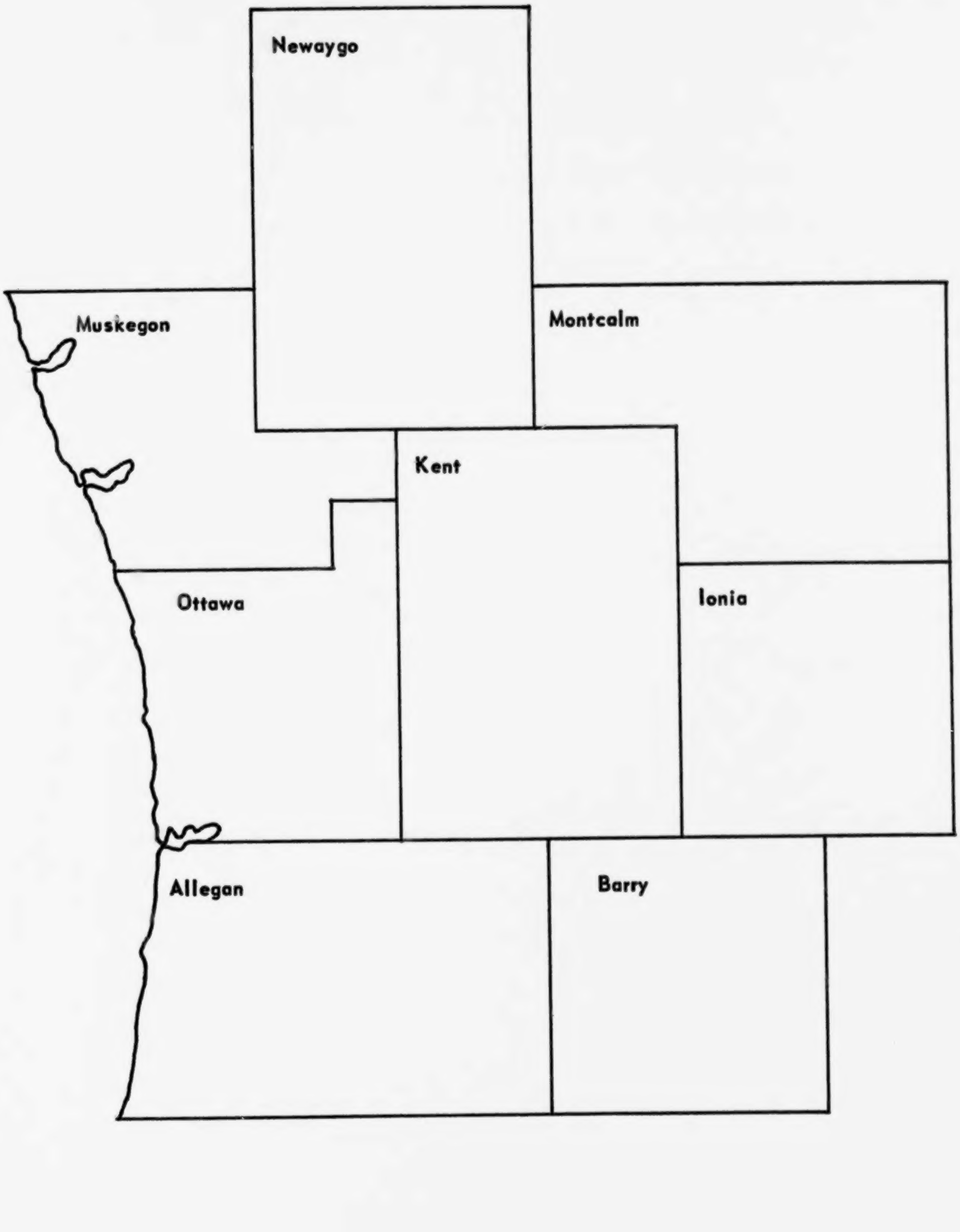
Newaygo
Muskegon
Montcalm
Kent
Ottawa
Ionia
Allegan
Barry

FIGURE 1 - - THE EIGHT - COUNTY AREA INCLUDED IN THIS STUDY

most accurate available information regarding future college-age youth in the area.

In addition, some direct evidence on student and parent interest in college attendance, in specific college programs, in type of college, etc., was gathered by means of a questionnaire administered to over 15,000 10th and 12th grade high school students and their parents, as well as the parents of 2nd grade students in certain elementary schools of the area.

The determination, whether a new degree-granting institution is needed in this area, is based upon: (1) the data relating population estimates with the intended level of service which presently existing colleges and universities of the state will provide as they expand their facilities; (2) the interest and motivation for attendance, as indicated by students and parents; (3) the intellectual and economic ability of college-age youth to attend college, and (4) the extent to which the state of Michigan is committed to the principle of providing higher educational opportunity on a sound geographically distributed basis.

CHAPTER II

Economic Characteristics of the State and the Eight-County Area

The decision to provide additional facilities for higher education do, of necessity, carry with them certain financial implications. If a state is to provide for a new institution of higher education, it must do so with the conviction that the facility is needed, and with the assurance that sufficient funds will be forthcoming for the support of such an institution. Likewise, where a community or a county undertakes the building of a new community college or even a four-year college, it should ascertain its ability to support the operation. At the same time, however, clear indications of the need for an institution of higher education in an area which does not appear able to support one must not be taken as the final argument for not establishing one. That is, if the facts point to the need for an institution of higher education in a given area, provisions for this need should be made, even if support funds must be sought from a larger portion of the state.

Over the years, the state of Michigan has provided well for the support of higher education for its youth. The state, local communities, and private philanthropy have contributed to the support of higher educational facilities to serve our youth. It is to be expected that this same attitude and concern for support of higher education will continue in the future.

It is clearly not the purpose of this study to analyze and present detailed data regarding the economy of the state of Michigan. For the purposes of what follows, however, several tabular summaries should suffice to indicate the general vigor of Michigan economy.

Table 2 -- Index of State Increases in Value Added by Manufacture in Selected North Central and Eastern States -- shows Michigan well at the top in the increases in value added by manufacture between 1947-1956. In this region, only the states of Iowa and Ohio surpass our state's increases.

The general vigor of the Michigan economy is manifest also when one studies the annual collections of sales and use taxes. Table 3 -- Michigan Sales and Use Tax Revenue, 1937-57 -- shows the steady increase in the taxes collected through this source up to 1957. Although comparable figures are not available for the 1958 year in which Michigan experienced a recession with the rest of the nation, it appears rather safe to suggest that recovery in the state should bring business and industrial indexes paralleling the national up-trend.

The Eight-County Area

Although the state of Michigan as a whole manifests definite economic strenghts, a study of economic figures for individual counties of the state reveals considerable variation on several criteria. A county by county summary of sales tax collections for each of the eight counties in this study is given in Table 4.

Table 6 summarizes data on retail trade for the state and for the eight counties in this area for 1948 and for 1954. Table 7 summarizes data on value added by manufacture, while Table 8 gives a summary of data on value of farm products sold in the state of Michigan and in the eight-county area.

Table 2. Index of State Increases in Value Added by Manufacture in Selected North Central and Eastern States, 1947-56*.

(U. S. Average Increase = 100)

State	Index
Iowa	137
Ohio	108
MICHIGAN	106
Missouri	106
Nebraska	106
Minnesota	99
Indiana	97
Illinois	85
Wisconsin	85
Pennsylvania	84
New York	70

* Source: Michigan Statistical Abstract, Bureau of Business and Economic Research, Michigan State University, page 119; 1958.

Table 3. Michigan Sales and Use Tax Revenues, Fiscal Years, 1937-1957*

Fiscal Year Ended June 30	Sales Tax [1]	Use Tax [2]	Total
1937	$ 54,774,610	$ -------	$ 54,774,610
1938	52,725,993	233,879	52,954,872
1939	50,971,044	531,529	51,502,573
1940	59,454,012	984,624	60,438,636
1941	71,808,474	1,365,502	73,173,976
1942	81,231,007	2,110,945	83,341,952
1943	84,073,445	2,314,789	86,388,234
1944	91,072,274	1,806,459	92,878,733
1945	97,606,672	1,753,153	99,359,825
1946	115,493,931	2,908,074	118,402,005
1947	156,609,282	4,273,873	160,883,155
1948	184,637,088	5,276,007	189,913,095
1949	194,841,715	5,321,905	200,163,620
1950	199,442,826	5,358,616	204,801,442
1951	240,861,581	7,006,157	247,867,738
1952	239,180,139	8,010,290	247,190,429
1953	261,811,786	10,749,091	272,560,877
1954	275,420,115	13,825,151	289,245,266
1955	286,232,144	15,653,526	301,885,670
1956	308,682,684	18,481,025	327,163,709
1957	309,205,609	20,260,940	329,466,549

(1) Includes penalty, interest and license fees.

(2) Includes penalty and interest.

* Michigan Statistical Abstracts, Bureau of Business and Economic Research, Michigan State University, page 209; 1958.

Table 4. Michigan Sales Tax Collections in the Eight-County Area, 1956-57.

County	1957 Population (Estimate)	% Population is of State	Sales Tax Collections	Per Cent of State Total	Per Capita Sales Tax
Allegan	61,220	0.79	$ 1,448,570	0.47	$ 22.66
Barry	32,400	0.42	716,254	0.23	22.10
Ionia	41,550	0.53	1,237,876	0.40	29.79
Kent	346,510	4.44*	15,715,062	5.12	45.35*
Montcalm	37,730	0.48	1,204,387	0.39	31.92
Muskegon	147,590	1.89	5,595,895	1.82	37.92
Newaygo	25,550	0.33	627,107	0.20	24.54
Ottawa	94,140	1.21	3,046,762	0.99	32.36
8-COUNTY TOTAL	786,690	10.08	$29,591,913	9.63	$ 37.62
STATE TOTAL	7,803,000	100.00	$307,181,635	100.00	$ 39.37

* Source: Michigan Statistical Abstract, Bureau of Business and Economic Research, Michigan State University, page 210; 1958.

Table 5. Total Bank Deposits for Michigan and the Eight Counties, June 30, 1956.

County	1957 Population (Estimate)	% Population is of State	Total Deposits	Per Cent of State Total	Per Capita Deposits
Allegan	61,220	0.79	$ 27,619,000	0.36	$ 451
Barry	32,400	0.42	15,447,000	0.21	477
Ionia	41,550	0.53	22,938,000	0.30	552
Kent	346,510	4.44	380,127,000	5.04	1097
Montcalm	37,730	0.48	21,588,000	0.29	572
Muskegon	147,590	1.89	99,764,000	1.32	676
Newaygo	25,550	0.33	12,557,000	0.17	491
Ottawa	94,140	1.21	73,061,000	0.97	776
8-COUNTY TOTAL	786,690	10.08	$653,101,000	8.66	$ 830
TOTAL FOR SEVENTH DISTRICT	7,803,000	100.00	$7,542,930,000	100.00	$967

Source: Michigan Statistical Abstract, Bureau of Business and Economic Research, Michigan State University, page 163; 1958.

Table 6. Retail Trade in Michigan and the Eight-County Area, 1948 and 1954.

County	Sales 1948 ($1000)	Sales 1954 ($1000)	Per Cent Increase 1948-54	% Population is of State	%, 1954, Retail Sales Were of State
Allegan	$ 36,510	$ 42,198	15.6	0.79	0.52
Barry	17,198	24,429	42.0	0.42	0.30
Ionia	26,762	37,941	41.7	0.53	0.46
Kent	289,327	393,926	36.2	4.44	4.82
Montcalm	27,666	34,734	25.5	0.48	0.43
Muskegon	112,737	140,844	24.9	1.89	1.72
Newaygo	13,572	17,896	31.9	0.33	0.22
Ottawa	61,751	84,086	36.2	1.21	1.02
8-COUNTY TOTAL	$ 585,523	$ 776,054	32.5	10.08	9.50
TOTAL FOR STATE	$5,854,445	$8,167,632	39.5	100.0	100.00

Source: Michigan Statistical Abstract, Bureau of Business and Economic Research, Michigan State University, page 142; 1958.

Table 7. Value Added to Goods by Manufacture for Michigan and the Eight Counties, 1954 ($1000)

County	Population (Estimate) 1954*	% Population Was of State	Value Added	Per Cent of Total for State	Value Added per Capita
Allegan	52,090	0.74	$ 25,821	0.30	$ 496
Barry	28,910	0.41	17,976	0.21	622
Ionia	39,030	0.56	22,607	0.26	579
Kent	321,680	4.58	454,194	5.22	1412
Montcalm	33,140	0.47	27,108	0.31	818
Muskegon	132,160	1.89	186,973	2.15	1415
Newaygo	23,940	(not included in total)	n.a.	-	-
Ottawa	83,060	1.18	92,137	1.06	1109
8-COUNTY TOTAL	690,070	9.80	$ 826,816	9.50	$ 1198
STATE TOTAL	7,024,000	100.00	$8,707,194	100.00	$ 1240

* Michigan Department of Health.

n.a. Figures withheld to avoid disclosure of individual establishments.

Source: Michigan Statistical Abstract, Bureau of Business and Economic Research, Michigan State University, page 120; 1958.

Table 8. Value of Agricultural Products Sold in Michigan and the Eight Counties, 1954 ($1000).

County	Population (Estimate) 1954*	% Population Was of State	Value of Farm Products Sold	Value as Per Cent of Total for State	Value per Capita
Allegan	52,090	0.74	$ 18,346	3.37	$ 352
Barry	28,910	0.41	7,055	1.29	244
Ionia	39,030	0.56	10,996	2.02	282
Kent	321,680	4.58	16,165	2.97	50
Montcalm	33,140	0.47	10,484	1.92	316
Muskegon	132,160	1.89	4,052	0.74	31
Newaygo	23,940	0.34	5,950	1.09	249
Ottawa	83,060	1.18	13,492	2.48	162
8-COUNTY TOTAL	714,010	10.20	$ 86,540	15.90	$ 121
STATE TOTAL	7,024,000	100.00	$ 545,071	100.00	$ 78

Source: Michigan Statistical Abstract, Bureau of Business and Economic Research, Michigan State University, page 87; 1958.

* Michigan Department of Health

The analysis of sales tax collections shows that only Kent county had a per capita collection figure which was greater than the per capita for the state. In Kent county, 5.12 percent of the total sales tax collections of the state were collected. Kent county had, in 1957, 4.44 percent of the population of the state. Thus, Kent county was the only county, in the eight, in which the percentage of the state's total of sales tax collections was greater than the county population was of the total state population. Similarly, the total collections for the eight counties was 9.63 percent of the total collected in the state, while the population of the eight counties was 10.08 percent of the state's total.

The data on bank deposits show very much the same sort of condition (Table 5). Again, only Kent county had per capita collections greater than the per capita for the state; only Kent county's proportion of bank deposits for the state was greater than its proportion of the state's population; and, the eight counties accounted for 8.66 percent of the state's bank deposits, while having slightly over 10 percent of the state's population.

The retail trade data of Table 6 also indicate the same condition existing. In addition, Table 6 shows the amount and percentage of increase in retail sales in each of the eight counties and the state of Michigan. During the period, 1948-54, retail sales rose 39.5 percent in the state; 32.5 percent in the eight counties. Only Ionia and Barry counties showed increases greater than the all-state increase.

On the factor of value added to goods by manufacture, the value added per capita for the eight counties is slightly under the per capita for the state as a whole. Only Kent and Muskegon counties show a per capita figure greater than the per capita for the state. These two counties also accounted for a slightly larger percentage of the value added for the entire state than their population would indicate.

On the factor of value of agricultural products sold, Table 8, the eight counties accounted for 15.9 percent of the state's total, while having only 10.2 percent of the state's population. The value per capita, $121, was considerably above the per capita value for the entire state. The data of these two tables indicate that all but Kent and Muskegon counties are more predominant in the value of agricultural products sold than in the value added to goods by manufacture. It should be kept in mind, however, that for the eight counties, the total value of agricultural products sold was slightly over 86 million, while the value added to goods by manufacture was over 800 million.

The main conclusion to be drawn from these tables is that there is considerable variation on factors of economy among the eight counties, with only Kent and Muskegon counties indicating values above the state averages.

Data compiled by Sales Management on effective buying power, income levels, and a sales activity index for 1958 and 1959 show the same variation among the eight counties in this area (See Table 9, 10, and 11). In Table 11, the four large cities in this area, Grand Rapids, Muskegon, Holland, and Grand Haven, manifest a much higher index of sales activity than the average for the other cities listed in the report. On effective buying power and the percentage of income above $6,999, Grand Rapids and Holland are at a fairly good level.

Table 9. Estimates of Population, Buying Power, and Income for Selected Cities in the Eight-County Area.*

City	Population 1/1/59	Effective Buying Power per Household	Effective Buying Power per Capita	Per Cent of Income Greater Than $6,999
Grand Rapids	190,900	6175	1925	45.9
Muskegon	51,100	5551	1727	38.1
Holland	10,600	6080	1836	42.9
Grand Haven	18,900	5260	1586	35.9
All Michigan Cities in S.M.*	4,586,400	6930	1990	53.1

*Source: 1959 Survey of Buying Power, p. 430, Copr. 1959, Sales Management Survey of Buying Power, further reproduction not licensed.

Table 10. Estimates of Population, Buying Power, and Income for the Eight-County Area.*

County	Population 1/1/59	Urban Population	Effective Buying Income per Household	Effective Buying Income per Capita	Per Cent of Income Greater Than $6,999
Allegan	52,000	12,000	4827	1420	30.3
Barry	32,800	7,000	4701	1462	31.7
Ionia	41,300	14,500	4501	1275	26.3
Kent	348,000	260,900	6015	1837	45.6
Montcalm	36,600	8,000	4525	1422	25.4
Muskegon	147,900	99,900	5318	1578	35.7
Newaygo	25,200	3,600	4478	1297	25.8
Ottawa	93,900	38,700	5123	1511	34.8
STATE TOTAL	7,892,900	5,450,900	6245	1810	48.3

*Source: 1959 Survey of Buying Power, p. 430, Copr. 1959, Sales Management Survey of Buying Power, further reproduction not licenses.

Table 11. Index of Sales Activity for the Eight-Counties and Selected Cities, 1958*.

Area	Index
Allegan	77
Barry	68
Ionia	80
Kent	106
Montcalm	92
Muskegon	96
Newaygo	70
Ottawa	88
Grand Rapids	155
Muskegon	178
Holland	173
Grand Haven	185
Michigan Cities in S.M.	133
STATE TOTAL	100

*Source: 1959 Survey of Buying Power, p. 430, Copr. 1959, Sales Management Survey of Buying Power, further reproduction not licensed.

For the individual counties in the group, the index of sales activity varies widely from 68 in Barry county to 106 in Kent. Actually, four of the counties have an index of 80 or below. This is to be compared with the index of 100 for the state. On effective buying, income, and percentage of income above $6,999, Kent, Muskegon, and Ottawa counties are above $5,000 and 34 percent respectively. It should be noted that none of the counties actually equals or excels the figures on buying income and percentage of incomes above $6,999 for the state as a whole.

One final basis for judging business and economic trends in this area is given in Table 12 and in Figure 2. In Table 12 are given three economic indexes for the state of Michigan and for Grand Rapids and Muskegon for the past eight years. Figure 2 shows the Business Activity index in graphical form.

It is again evident that, except for the general dip indicated for 1958, the state Business Activity index has continued steadily upward. The index for Grand Rapids has also kept pace with this upward trend, while the index for Muskegon has moved upward, but at not quite the same rate.

To recapitulate briefly, although the general statistics indicate continued economic strength of the state of Michigan, analyses of the data for individual counties in the area being studied reveal wide variations on the criteria cited. It is interesting to note here a point which will be discussed later, that the counties in this area now supporting public or private colleges are generally the ones with the relatively high economic indexes. The Russell Report on Higher Education in Michigan also established the fact that the counties without any institutions of higher learning were

Table 12. Michigan Economic Indexes (1947-49 = 100)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959 (March)
Business Activity Index										
Michigan	116.0	118.7	123.4	152.6	147.8	174.1	179.0	180.5	168.1	185.0
Grand Rapids	99.6	113.9	113.2	124.3	130.4	156.2	163.9	163.2	161.8	174.4
Muskegon	100.0	109.8	112.1	130.1	122.7	135.1	141.7	143.0	136.0	142.5
Retail Sales Index										
Michigan	115.6	124.8	126.9	145.2	143.5	160.1	161.2	163.3	157.0	168.2
Grand Rapids	113.9	122.9	121.6	135.3	140.9	153.6	159.3	157.9	154.8	171.6
Muskegon	104.9	118.9	121.9	134.2	133.9	147.7	157.7	156.9	151.9	162.3
Bank Debits Index										
Michigan	119.5	136.2	137.8	167.9	164.0	192.7	204.5	212.3	200.3	221.5
Grand Rapids	113.4	130.8	126.0	136.8	143.8	172.9	187.3	192.0	192.4	208.6
Muskegon	103.1	126.0	124.8	143.2	135.3	149.6	162.0	168.2	162.1	170.4

Note: Calculated from data furnished by Michigan State University Bureau of Business and Economic Research.

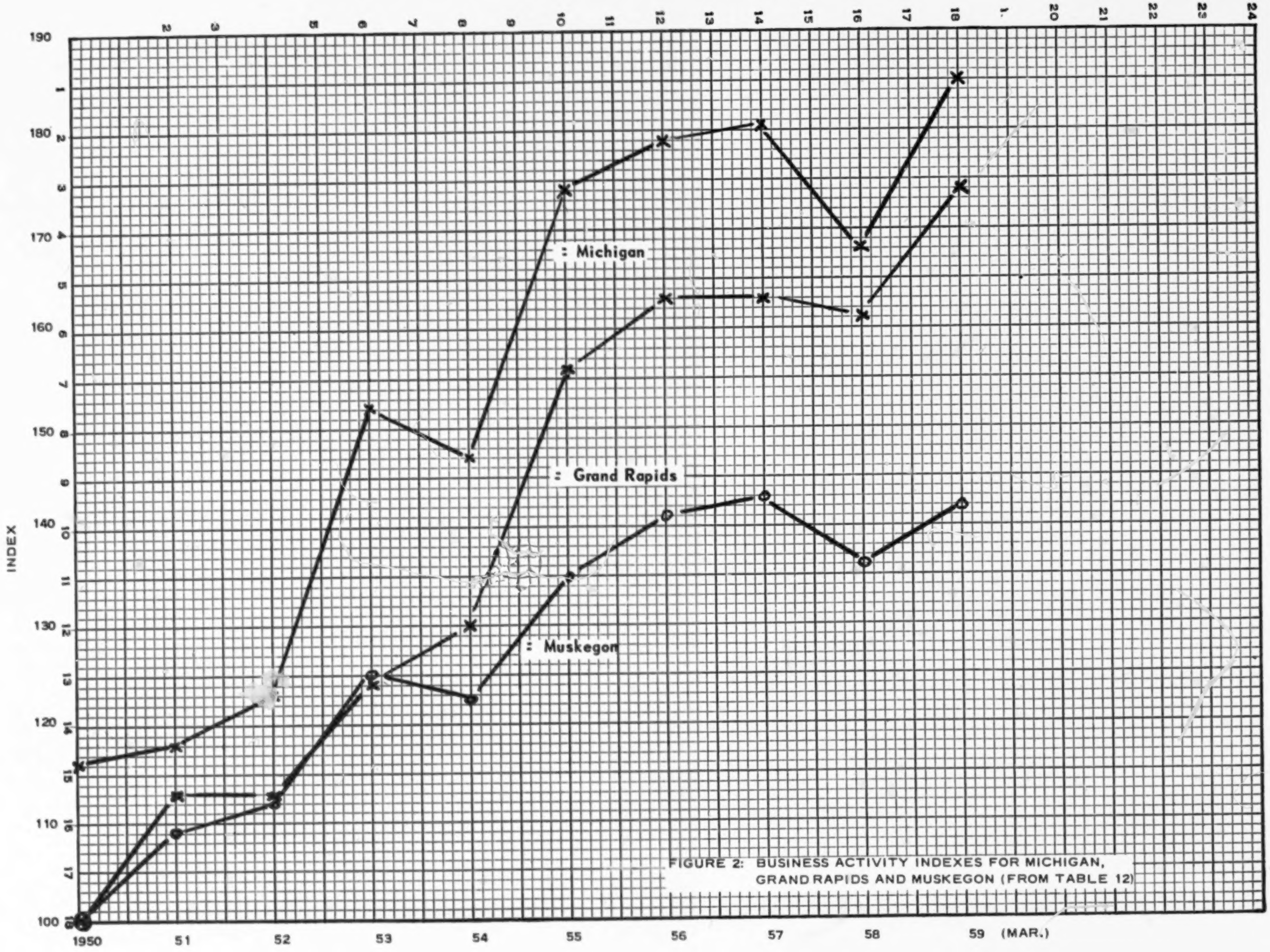

FIGURE 2: BUSINESS ACTIVITY INDEXES FOR MICHIGAN, GRAND RAPIDS AND MUSKEGON (FROM TABLE 12)

the ones with the lower percentages of college-age youth attending college. Whatever the direction of cause and effect may be, the fact remains that if we wish to encourage larger numbers of students to attend college and make the opportunity for a higher education available, the institutions must be located within reasonable distances to the youth of the state.

One answer to the provision of post-high school educational opportunity lies in the establishment of community colleges. This, however, presupposes an economy capable of supporting such an institution at the local level. One might actually raise the question whether more than two or three of these eight counties would be in a position to support, adequately, community colleges within their borders. But, the Director of the Study wishes to emphasize the point that local inability to support a college is not to be used as a basis for denying the opportunity to the young people of the area.

CHAPTER III

Population and School and College Enrollment Characteristics of Michigan and the Eight-County Area

Probably the most important criterion to be considered in the determination of need for higher educational facilities is the number of young people to be served by these facilities at any given time. This involves the making of estimates of the number of college-age youth at the national, state, and local levels. And, the making of estimates of college-age populations, especially for geographical areas smaller than the individual states, proves to be a particularly difficult process. But, even after estimates of college-age youth have been made, it is apparent that some conclusions have to be reached regarding the percentage of these youth who will actually be seeking education beyond the high school. In this report, the terms"college" and "higher education" refer to institutions offering education beyond the high school, which are listed in the U. S. Office of Education Directory of Higher Education.

A second approach to the problem, and perhaps a more accurate one, if the complete data were available, would be to make projections of high school graduates, and then make estimates as to the percentage of these youth who would be going on to college. Unfortunately, although data on high school graduates are available, data regarding the percentage of these youth who have gone on are generally lacking. In fact, data on the percentages of college-age youth who go on to college, for smaller areas than the nation and the individual states, are also lacking except in those cases where special surveys have been made. Special surveys in certain states have also made data available on the percentage of high school graduates who go on to college.

For the purposes of this study, projections of college-age youth, high school graduates, and potential college attenders have been made by the Director of the Study. These projections have been calculated using insurance survival tables, empirical school survival data for the state of Michigan, and other pertinent factors.

Population trends and projections for the state of Michigan and for the individual counties in the area are also presented. Such projections are prepared by several state organizations. The projections of state and county populations used here were obtained through the Michigan Department of Health and Dr. J. F. Thaden of Michigan State University.

Table 13 summarizes the population projections made by Dr. Thaden[1] for the state of Michigan and the eight counties in this study. According to the data of this table, the population increase of the eight counties, between 1957 and 1970, will be about 28.0 percent. For the state as a whole it will be 29.9 percent. In other words, the rate of increase for the eight counties will be only slightly lower than the rate of increase for the entire state.

Another factor which is clear from this table is that the rates of increase for the individual counties will vary considerably. For example,

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[1] J. F. Thaden, Population Growth Components and Potential in Michigan, Institute for Community Development and Services, Michigan State University, 1958

Table 13. Michigan and 8-County Population Growth and Projections, 1940-70.

County	1940	1950	1957 (1)	1965 (1)	1970 (1)	% Increase 1957-1970
Allegan	41,839	47,493	61,882	73,600	83,800	35.4
Barry	22,613	26,183	32,400	37,700	42,400	30.9
Ionia	35,710	38,158	41,550	43,400	46,000	10.7
Kent	246,338	288,292	346,510	395,500	439,500	26.8
Montcalm	28,581	31,013	37,730	43,500	48,600	28.8
Muskegon	94,501	121,545	147,590	169,600	189,200	28.2
Newaygo	19,286	21,567	25,550	27,500	30,000	17.4
Ottawa	59,660	73,751	94,140	112,500	127,800	36.8
Total	548,528	648,002	786,690	903,300	1,007,300	28.0
State of Michigan	5,256,000	6,372,000	7,803,000	9,150,000	10,133,000	29.9
Per Cent 8 Counties Are of the State	10.4	10.2	10.1	9.9	9.9	-

(1) Thaden, J. F., Michigan State University.

the estimates for Ionia county call for an increase in population of only 10.7 percent, while Ottawa county should experience an increase of 36.8 percent.

The factor of migration is one which is generally difficult to cope with in making population projections for any area. Some idea of the contributions which the factor of migration has had on the eight counties of the area, as well as the state of Michigan, may be had from the data in Table 14. These data are for the period 1950-57, and are also obtained from information provided by Dr. Thaden.

For the state as a whole, in-migration accounted for 36.4 percent of the population increase which occurred during the 1950-57 period. For the eight counties, in-migration accounted for 32.4 percent of the increase, only slightly less than the rate for the state. Only one of the eight counties experienced a net out-migration during this period. That county was Ionia. In three of the counties, Allegan, Barry, and Montcalm, over half of the population increase was accounted for by in-migration.

This table also summarizes the numerical and percentage population change which occurred in each of the eight counties during the 1950-57 period. During this period, the population of the state increased by 25.9 percent, while the eight counties experienced an increase of 25.3 percent. The county that recorded the largest percentage of increase was Ottawa with 34.2 percent.

One might speculate, quite reasonably, regarding the effects that in-migration, resulting from such factors as the St. Lawrence Seaway and the increasing diversification of industry in several parts of these

Table 14, Estimates of Net In-Migration for Michigan and the 8-County Area, 1950-57 (*).

County	Population Change 1950-57	Per Cent Increase 1950-57	Net Migration	% Change Due to Migration
Allegan	13,727	32.8	7,704	56.1
Barry	6,217	27.5	3,599	57.9
Ionia	3,392	9.5	-707	-20.8
Kent	58,218	23.6	14,972	28.7
Montcalm	6,717	23.5	3,694	55.0
Muskegon	26,045	27.6	5,416	20.8
Newaygo	3,983	20.7	1,570	39.4
Ottawa	20,389	34.2	8,673	42.5
Total	138,688	25.3	44,921	32.4
State of Michigan	1,431,234	25.9	520,654	36.4
Per Cent 8 Counties are of State	9.7	-	8.6	-

(*) Thaden, J. F., Michigan State University.

eight counties, may have on the projected population figures. In the opinion of the Director of the Study, these two factors, in addition to others, should be responsible for at least the same level of in-migration in this area as has occurred in the past decade. As a matter of fact, if the cities of Grand Rapids, Holland, Muskegon, and Grand Haven can encourage industrial diversification and the establishment of new industry and business, the in-migration factor may rise well above the general state average, not to speak of the positive effect that this would have on the stability of local economy.

Projections of College-Age Youth

In this section, projections of college-age youth (18-21 year olds) for the eight-county area are made for the years 1965, 1970, and 1975. Such projections should provide fairly realistic bases for estimating the need for additional college facilities to serve the increasing numbers of youth in this area. The qualification should again be made that, like other projections of populations, these projections must be considered simply as approximate indicators of the level of population increases. It is clear that the projections are based on several assumptions that could well change during the next decade or two. It should be noted that in making the projections of college-age youth, the factor of in-or-out-migration is not included in the computations, although, as was pointed out above, this cannot be dismissed as an unimportant affector of population increases in this area. From the data presented, it may be concluded, however, that if anything, this area would be one of net in-migration, thus making the projections conservative estimates.

One method of estimating the college-age population of this area is to utilize the figures of general population projections which have been made for the state of Michigan and for the eight-county area in a "constant percentage" relationship with projections of college-age youth which have been made for the state. Figures for the state and county projections have been calculated by Dr. Thaden; projections of college-age youth for the entire state have been made by Dr. John Dale Russell for the Michigan Legislative Committee on Higher Education.

Table 15 presents the data on general population figures for the state and the eight counties with the college-age youth projections for the state for the years 1965 and 1970. The number of college-age youth for the eight-county area, then, is calculated by noting that the 18-21 year old group for the state is a certain percentage of the total population. Assuming that the 18-21 year old group in the eight-county area will also be this same percentage of the general population of the eight counties, we obtain the estimates of college-age youth for the eight counties as shown in the table.

For example, the projection of general population for the state is 9,380,000; the Russell Report projected the number of college-age youth for that year to be 494,476. This latter figure was 5.27 percent of the total population of the state. Now, the projected population for the eight-county area for 1965 is 903,300. Assuming that the number of college-age youth in the eight-county area will be the same percentage of the general population in this area as it will be in the state, namely 5.27 percent, a simple multiplication yields the projections of 47,603

Table 15. Population and College-Age Youth Trends and Projections for Michigan and the Eight-County Area*.

	1940	1950	1955	1957	1965	1970
Michigan	5,256,000	6,372,000	7,326,000	7,803,000	9,380,000	10,483,000
No. of 18-21 year olds	339,441	351,356	329,135	347,882	494,476	624,995
Percentage of State Population	6.45	5.51	4.49	4.45	5.27	5.96
8-County Population	548,528	648,002	736,640	786,690	903,300	1,007,300
18-21 year olds in Eight-County Area	35,380	35,704	33,075	35,007	47,603	60,035

* Based on data supplied by Dr. J. F. Thaden and the Reports of the Survey of Higher Education in Michigan, 1958.

college-age youth for the eight-county area for 1965. This same procedure yields a figure of 60,035 college-age youth for 1970.

Calculations using data for one of the later reports of the Michigan Survey of Higher Education[2] lead to the conclusion that these estimates of college-age youth for this eight-county area are probably much too conservative. Specifically, the estimate of college-age youth for 1955 is given in Table 15 as 329,135. The computations in Staff Study No. 2 yielded the figure of 347,791 which would be 4.75 percent of the state population for that year. This, in turn, would yield 34,999 college-age youth for the eight-county area. However, the actual figures for college-age youth in each of the eight counties reported in Staff Study No. 2 totals to 37,173. One must conclude, then, that the constant percentage method appears to have limitations in its application to this eight-county area. Also, projections in a number of other states indicate that the percentage that college-age youth are of the total state population would be more nearly equal to 7 percent rather than the 5.27 and 5.96 percent shown in Table 15.

For these reasons, and in an attempt to provide more reliable and realistic estimates, this study utilized current data on births and of the state school census to make the estimates of college-age youth for the state of Michigan and the eight-county area shown in Table 16. By using birth and school census data with insurance survival tables, more current estimates can be made.

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[2] John Dale Russell, Geographic Origins of Michigan College Students, Staff Study No. 2. p. 12

Table 16. Projections of College-Age Youth for Michigan and the Eight-County Area for 1965.

	Michigan			Eight-County Area			
Age Group	Number in 1955	Age Group	Number in 1965	Age Group	Number in 1955	Age Group	Number in 1965
8-year olds	163,904	18-year olds	162,741	8-year olds	17,325	18-year olds	17,202
9-year olds	119,523	19-year olds	118,599	9-year olds	12,938	19-year olds	12,838
10-year olds	119,018	20-year olds	118,012	10-year olds	12,928	20-year olds	12,818
11-year olds	122,488	21-year olds	121,353	11-year olds	13,101	21-year olds	12,979
TOTALS:							
8-11 year olds	524,933	18-21 year olds	520,705	8-11 year olds	56,292	18-21 year olds	55,837

Table 16 shows the number of 8-11 year olds in the state of Michigan and in the eight-county area for 1955. Based on the survival rates for the United States population (1949-51) found in the Life Insurance Fact Book - 1959, estimates of 18-21 year olds for 1965 are given in Column 2 for the state and in Column 4 for the eight-county area. It should be pointed out that the figure of 520,705 college-age youth estimated for 1965 is about 26,000 greater than the estimate made in the 1958 Michigan Survey of Higher Education. The discussion presented earlier in this report indicates why the figure of 520,705 appears to be a more reasonable one. This table also shows the estimate of college-age youth for the eight-county area to be 55,837 for 1965.

The projections of 18-21 year olds for the eight-county area for 1970 are shown in Table 17. The calculations are based on the number of 0-4 year olds in each of the eight counties in 1952. For the entire eight-county area, the projection is for a total of 63,314 college-age youth in 1970. Of this total, 44.7 percent are accounted for by Kent county alone, and the counties of Kent, Ottawa and Muskegon would account for 76.7 percent of the total. Table 18 presents a projection of the number of college-age youth for the state of Michigan in 1970.

Projections of college-age youth for 1975 are given in Table 19 for the state of Michigan, and in Table 20 for each of the eight counties in this area. The projections of Table 19 are based on the number of 0-4 year olds in 1957; the data of Table 20 are also based on the number of 0-4 year olds in 1957. Again the survival rates given in the Life Insurance Fact Book - 1959 were used in these calculations.

Table 17. Projection of College-Age Youth for the Eight-County Area - 1970.

County	Number of 0-4 yr. olds in 1952	Number of 18-21 yr. olds in 1970	Per Cent of Total 18-21 yr.olds
Allegan	5,666	4,432	7.0
Barry	2,911	2,279	3.6
Ionia	4,362	3,419	5.4
Kent	35,946	28,300	44.7
Montcalm	3,338	2,596	4.1
Muskegon	15,904	12,474	19.7
Newaygo	2,564	2,026	3.2
Ottawa	9,870	7,788	12.3
Totals:	80,561	63,314	100.0

Table 18. Projection of College-Age Youth in Michigan for 1970.

Age	Number in 1952	Number of 18-21 Year Olds in 1970
4	152,337	150,032
3	151,546	149,274
2	149,867	148,049
1	154,493	147,867
Total:	608,243	595,222

Table 19. Projection of College-Age Youth in Michigan for 1975.

Age	Number in 1957	Number of 18-21 Year Olds in 1975
4	178,612	175,678
3	183,609	175,979
2	186,508	183,564
1	182,037	174,038
Total:	730,766	709,259

Table 19 shows an estimate of approximately 709,259 college-age youth in the state of Michigan by 1975. The data of Table 20 indicate that the eight-county area should anticipate approximately 72,500 college-age youth by 1975. It should be noted again that the concentration of these youth would be in the counties of Kent, Muskegon, and Ottawa.

Table 21 summarizes the estimates for the state and for the eight-county area. Also shown are the percentages that the college-age population would be of the total population. Thus, in 1970, the 595,222 college-age youth of the state would be 5.87 percent of the total projected population. For 1970, in the eight-county area, the 63,314 college-age youth would be 6.29 percent of the estimated population of that area. Finally, also given are the percentages that the college-age youth projections for the eight-county area are of the total college-age population projections for the state. These figures indicate a definite rise in the percentage that college-age youth will be of the total population during the coming two decades. These projections also indicate a generally steady level in the percentage that the college-age youth of the eight-county area are of the college-age population of the state.

High School Graduate Populations

Another very useful basis for obtaining trends in college enrollments can be found in data regarding the number of high school graduates during the next fifteen or twenty years. Estimates of these figures coupled with estimates of the percentage of high school graduates who are and may be seeking post-high school education, provide another source of information on college enrollment projections.

Table 20. Projections of College-Age Youth in the Eight-County Area for 1975.

County	Number of 0-4 yr. olds in 1957	Number of 18-21 yr. olds in 1975
Allegan	6,987	5,220
Barry	3,007	2,247
Ionia	4,854	3,625
Kent	43,625	32,697
Montcalm	4,136	3,117
Muskegon	19,048	14,282
Newaygo	2,832	2,102
Ottawa	12,194	9,135
Total:	96,683	72,500

Table 21. Percentage That College-Age Youth Will Be of Total Population in Michigan and 8-County Area.

	Michigan				8-County Area			
	1957	1965	1970	1975	1957	1965	1970	1975
Total Population	7,803,000	9,150,000	10,133,000	--	786,690	903,300	1,007,300	--
College-Age Population*		520,705	595,222			55,837	63,314	
	347,882	494,476	624,955	709,300	37,137	55,837	63,314	72,500
Percentage College-Age is of Total Population*	4.46	5.69	5.87	--	4.72	6.18	6.29	--
		5.40	6.17					
Percentage 8-County College-Age is of State College-Age					10.68	10.72	10.64	
						11.29	10.13	10.22

* Two estimates and two corresponding percentages are given for 1965 and 1975.

Table 22 summarizes the end-of-the-year public school enrollments in the various grades in the eight-county area. These data were obtained from the Michigan Department of Public Instruction. From this table, one must conclude that the public school enrollments of this area, as throughout the state, are rising rapidly. Where in 1950 there were only 10,434 children in kindergarten, there were 17,234 in kindergarten in 1958. That represents an increase of about 65 percent in an eight-year period. A similar observation can be made with respect to the 12th grade enrollments in the eight-county area. These rose from 4,698 in 1950 to a total of 6,328 in 1958, representing an increase of about 35 percent. These rapid increases in the elementary school and the high school will certainly be reflected in college-going youth in the near future.

Using data for the state of Michigan, each of the eight counties in the study, and school-survival rates for the state, it is possible to make projections of 12th grade enrollments for the state and each of the counties. The trends and projections of these data are shown in Table 23. Based on first-grade enrollments for 1953 and 1958, and assuming a 61 percent survival rate, the state of Michigan should have about 75,317 12th grade students in 1965 and approximately 91,960 in 1970 in its public schools. It should be recognized that these figures probably represent a conservative estimate for this group.

For the individual counties, it appears that Kent, Muskegon, and Ottawa will experience the large enrollment increases. For the eight counties as a group, using the 1st grade enrollments for 1953 and 1958, the estimates of the 12th grade enrollments total 7,214 for 1965, and

Table 22. End-of-Year School Enrollments for the Eight Counties, 1950-58* (Public Schools Only).

Year	---Grade--- K	1	2	3	4	5	6	7	8	9	10	11	12	% of Increase in 12th Graders Over Previous Yr.
1950	10,434	11,107	10,060	9,476	8,800	8,380	8,219	8,062	7,715	7,102	6,019	5,120	4,698	-
1951	10,815	10,830	10,910	10,302	9,736	8,981	8,680	8,404	8,077	7,525	6,320	5,130	4,752	1.2
1952	12,432	10,673	10,584	10,826	10,129	9,539	9,055	8,628	8,532	7,474	6,624	5,368	4,780	0.6
1953	15,357	12,029	10,523	10,477	10,775	10,176	9,430	8,944	8,404	7,928	6,719	5,698	5,038	5.4
1954	14,603	14,743	11,721	10,452	10,416	10,753	10,105	9,566	8,691	8,048	7,119	5,804	5,261	4.4
1955	15,426	14,000	14,297	11,597	10,409	10,284	10,667	10,265	9,301	8,413	7,273	6,282	5,362	1.9
1956	15,383	14,615	13,630	14,221	11,475	10,398	10,237	10,801	9,984	8,894	7,717	6,305	5,697	6.2
1957	16,718	14,529	14,175	13,517	13,892	11,299	10,336	10,386	10,479	9,827	8,264	6,757	5,790	1.6
1958	17,234	15,464	13,936	13,973	13,253	13,656	11,168	10,513	10,111	10,351	9,126	7,497	6,328	9.3 (34.7%)

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* Department of Public Instruction.

Table 23. Trends and Projections of 12th Grade Enrollments in Michigan and the Eight-County Area, 1950-70, (Public and Parochial).

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1965[1]	1970[1]
Michigan	54,121	52,075	53,436	56,115	57,802	60,974	66,168	66,586	70,835	100,994	113,054
Allegan	304	346	366	359	433	413	476	428	497	574	864
Barry	256	250	287	264	299	294	324	293	322	317	386
Ionia	347	337	322	320	326	346	374	348	385	403	492
Kent	2,551	2,529	2,473	2,676	2,820	2,829	3,039	3,187	3,388	3,195	5,341
Montcalm	445	379	401	414	438	440	489	470	537	409	530
Muskegon	979	968	1,003	975	1,044	1,146	1,186	1,263	1,401	1,669	2,294
Newaygo	233	225	202	229	255	247	258	257	284	301	378
Ottawa	679	718	725	819	797	943	952	1,019	1,091	993	1,587
Total Eight-County	5,794	5,752	5,779	6,056	6,412	6,658	7,098	7,265	7,905	9,168	11,872
Per Cent of State	10.7	11.0	10.8	10.8	11.1	10.9	10.7	10.9	11.2	9.1	10.5

(1) 61% survival of 1st graders.

9,290 for 1970. However, using school survival rates on current 4th and 5th grade students in this area, these estimates would be 8,828 and 10,592 respectively. Most probably, then, the eight-county area should experience an increase in 12th grade enrollment of 55 to 65 percent by 1970. There could very well be a doubling of 12th grade enrollees by 1975.

College Enrollment Projections

As was indicated above, the projection of numerical levels of the youth who will be seeking education beyond the high school is basic in drawing conclusions about needed facilities for higher education in the state of Michigan. It must also be re-emphasized that the projections of college enrollments which are made, carry with them a variety of assumptions which underscore the need to consider these projections as tentative and approximate.

In the present study, the projections of college enrollments for Michigan and for the eight-county area are based on the analysis of (1) projected college-age youth and (2) projected estimates of the number of high school graduates in our high schools. There are, of course, certain limitations in both of these methods. In talking about data related to the percentage of college-age youth who have attended institutions of higher education from any given state, one finds that the data fail to distinguish, in the totals given as enrollments for the state, students who are attending within their home state from those attending there from out-of-state. In other words, a state may report 120,000 college-age youth, and that their present enrollments in higher education are

60,000. This would yield a figure of 50 percent of their college-age youth as attending. However, the calculations fail to account for the number of their youth attending out of state, or the number of out-of-state youth attending in the state and thus being counted in the 60,000.

In the state of Michigan the number of students attending our colleges from out of state, and the number of our youth attending colleges in other states has been nearly equal. Thus, very little error is introduced when these computations are made using total institutional enrollments and estimates of college-age youth for the state as a whole.

Complex problems are also encountered in using data on percentages of high school graduates who go on to college. The main problem is that not enough carefully collected data are available on the problem of the percent of high school graduates attending colleges. Also, relating high school graduates for any given four-year period carries with it the problem of including in the actual college enrollments students who graduated from high schools outside of this one period and the students who have dropped out of college.

In Table 24 are given data summarizing college-age and college enrollment figures for the state of Michigan. The actual figures for the years 1940, 1950, 1955, and 1957 indicate a definite increase in the percentage of college-age youth of Michigan who attended higher educational institutions. The most recent computation, for 1957, would indicate that college enrollments are almost 40 percent of the college-age youth of Michigan. So, not only are college enrollments increasing

Table 24. College Enrollments and Projections of College Enrollees for Michigan (As Percentages of College-Age).

	1940	1950	1955	1957	1965(1)		1965(2)	
					(a)	(b)	(c)	(d)
College-Age in Michigan	339,441	351,356	329,135	347,882	494,476	494,476	520,705	520,705
College Enrollments in Michigan Colleges and Universities	52,815	94,723	119,833	137,564	194,824	217,075	205,157	228,589
Per Cent of College-Age	15.6	27.0	36.4	39.4	39.4	43.9	39.4	43.9

	1970(1)		1970(2)		1975(1)	1975(2)
	(a)	(b)	(c)	(d)	(a)	(b)
College-Age in Michigan	624,995	624,995	595,222	595,222	709,300	709,300
College Enrollments in Michigan Colleges and Universities	246,232	281,247	234,517	267,849	279,464	319,185
Per Cent of College-Age	39.4	45.0	39.4	45.0	39.4	45.0

(1) The lower of two college-age estimates.
(2) The higher of two college-age estimates.

numerically, but there has been a definite increase in the percentage of college-age youth attending colleges and universities in the state of Michigan.

Several different projections of college enrollments are given in Table 24. For 1965, two estimates of college-age youth are used, 494,476 as the lower estimate and 520,705 as the higher of two estimates made in this study. Then, for each of these two estimates, two different rates of attendance are used. One assumption made is that the percentage of college-age youth attending in 1965 will be equal to the percentage attending in 1957. The other assumption is that the percentage will have increased by then to 43.9 percent. This would assume an increase in the rate of attendance to be about 0.5 percent per year for the next eight years, a very reasonable assumption to make.

For the lower estimate of college-age youth, the calculations yield 194,824 college enrollees in Michigan in 1965 if we assume 39.4 percent attending, and 217,075 if we assume 43.9 percent attending. Using the estimate of 520,705 college-age youth, we obtain 205,157 college enrollees if we assume 39.4 percent attending, and 228,589 college enrollees if we assume 43.9 percent of the college-age attending.

For 1970, using the college-age projection of 624,995, there would be 246,232 college enrollees if we assume 39.4 percent of the college-age group attending; we obtain an estimate of 281,247 college enrollees if the percentage of college-age attending would be 45.0. Using the other estimate of projected college-age population -- 595,222 -- we obtain a projected college enrollment of 234,517 assuming 39.4 percent of the college-age in attendance, and the total of 267,849 college enrollees if we assume 45.0 percent of the college-age group in attendance.

For the year 1975, two projections of college enrollments are made. One is based on the college enrollments being 39.4 percent of the college-age population; the other is made on the assumption that college enrollments will be 45.0 percent of the college-age population. In the first instance, we obtain an estimate of 279,464 college enrollees; in the second instance we obtain a total of 319,185 college enrollees for the state of Michigan.

It should be emphasized here that these estimates make certain assumption about the percentage that college enrollments in Michigan will be of the college-age population of Michigan. As was indicated above, this percentage has been increasing rather steadily for Michigan during the past decade or two. It seems most realistic, in the opinion of the Director of the Study, to assume that the percentage of college-age youth attending colleges and universities will not rise beyond the 45.0 percent level by 1975.

In addition to the numerical increase of college enrollees in proportion to the number of 18-21 year olds, there are at least two factors which can contribute to an apparent increase in the percentage of college-age youth attending college the way the figure is calculated at present. First, the total number of college enrollees in a state should exclude the out-of-state students attending in the state and include the state students who are attending out-of-state. Secondly, the numerator, typically given as representing college enrollments and then divided by the number of college-age youth (18-21 year olds), includes an increasing number of students who are beyond the age of 21, especially in institutions offering an expanding graduate program.

These limitations, though real, are not quite as disabling as they may seem at first. If the aim is to project the number of college enrollees in a given state, neither one of these factors mentioned should be eliminated from the computations, for certainly, expansions in graduate programs will continue as will, in all likelihood, higher educational service to out-of-state students.

What the percentage of college-age youth actually attending college will be is very much open to further study. In a recent survey by Elmo Roper and Associates, conducted for the Ford Foundation, a nation-wide sampling was made of parents' expectations with regard to their children going to college. As part of the present survey, a similar study was made of parents and high school students in the eight-county area.

The Roper Survey was conducted in April of 1959, and covered the entire United States. It included a sample of 5,000 heads of households. Included in this sample were families with a total of 6,295 children under 18 years of age, and not in college. For this entire group, the respondents indicated that 29 percent of the children were "definitely expected to go to college." For another 40 percent, the parents said their children "will probably go to college." In other words, the percentage of youth under 18 expected to go to college "definitely" or "probably" is 69. A realistic estimate, then, would seem to be somewhere between 35 and 45 percent who would actually go on to college. It must be remembered that these responses referred to all youth below the age of 18, representing a variety of economic levels, and a wide range of abilities.

In a recent publication[3] the Research Division of the National Education Association presented data showing that the college enrollments for 1958 were 38.6 percent of the 18-21 year old population. Furthermore, where in 1950 the median of schooling for individuals 25 years or older was 9.3 years, they are estimating that by 1960 this will be 10.8 years; by 1970 it will be 12.0 years; and by 1980 the median schooling completed by individuals 25 years and older will be 12.2 years. One interpretation of these figures is that, since these are medians, at least one-half of the individuals 25 years or older will have started in post-high school education of some sort by 1970.

Taking the results of the Roper Survey into account, the results of several other studies of college attendance in Minnesota, Wisconsin, and other states, and the estimates of the National Education Association, it seems reasonable to make the following projections of college enrollees in the state of Michigan for 1965, 1970, and 1975.

In Table 25, two estimates are given for each of the years. The lower of the two estimates for each of the three years represents the calculation based on a slightly lower number of college-age youth projected for those years, and on the assumption that during those years,

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[3] National Education Association, Research Bulletin, October 1959

Table 25. Projections of College Enrollees for the State of Michigan, 1965-1975.

Year	Projected Number of College-Age Youth	Percentage that College Enrollments are of College-Age Youth	Number of College Enrollees
1965	494,000	39	192,600
1965	520,000	43	223,600
1970	600,000	39	234,000
1970	625,000	45	281,200
1975	710,000	39	277,000
1975	710,000	45	319,500

the college enrollments in the state of Michigan will continue to be about 39 percent of the college-age youth. The higher of each of the two estimates is based on a somewhat higher projection of college-age youth and the assumption that the percentage that college enrollments are of college-age youth will rise to 43 percent in 1965 and to 45 percent for 1970 and 1975.

In Table 25, then, we are projecting the number of college enrollees for Michigan to be between 192,000 and 223,600 for 1965; between 234,000 and 281,200 for 1970; and between 277,000 and 319,500 for 1975.

College Enrollment Projections for the Eight-County Area

Using College-Age Projections

Using the approach described above for projecting college enrollments for the state of Michigan, estimates of college enrollments that can be expected from the eight-county area are made in Table 26. The estimates of college-age youth for the eight-county area are taken from Table 21 as they were calculated for this report. In Table 26, four projections are made for 1965, and two each for 1970 and 1975.

The actual enrollments for 1955, for the eight-county area, showed a total of 9,842 enrollees from a group of 37,137 college-age youth. This was 26.5 percent of the total college-age youth. It must be pointed out that the percentage of college-age youth attending college from each of the eight counties differs noticeably from one county to the other. Table 27 presents data taken from the Russell Report on the percentage of college-age youth attending colleges in Michigan. These data are for 1955. For example, the enrollments in Michigan colleges from the eight-county area were 24.1 percent of the college-age total for that year.

Table 26 College Enrollments and Projections of College Enrollees for the Eight-County Area - (As Percentages of College-Age Population)

	1955	1965			
		(a)	(b)	(c)	(d)
College-Age	37,137	55,837	55,837	55,837	55,837
College Enrollees in Michigan Colleges and Universities	9,842	14,797	16,751	19,542	22,334
Per Cent of College-Age	26.5	26.5	30.0	35.0	40.0

	1970	1970	1975	1975
	(a)	(b)	(a)	(b)
College-Age	63,320	63,320	72,500	72,500
College Enrollees in Michigan Colleges and Universities	18,996	25,328	21,750	29,000
Per Cent of College-Age	30.0	40.0	30.0	40.0

Table 27. College-Age Population and Percentage that Students from Each County Attending College in Michigan are of the College-Age Population of the Eight Counties*.

County	Estimated College-Age Population, 1955	Number Attending College in Michigan	Percentage of College-Age Population
Allegan	2,882	485	16.8
Barry	1,691	267	15.8
Ionia	2,301	394	17.1
Kent	15,287	4,481	29.3
Montcalm	1,994	327	16.4
Muskegon	7,146	1,548	21.7
Newaygo	1,510	196	13.0
Ottawa	4,326	1,250	28.9
Total:	37,137	8,948	24.1

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* Russell, John Dale. Geographic Origins of Michigan College Students, Staff Study No. 2. 1958.

Actually, only two counties, Kent and Ottawa, exceeded this percentage. In Kent county, 28.3 percent of the college-age students were in attendance, while in Ottawa county, 28.9 percent were attending colleges in Michigan. Muskegon county was the next highest, with 21.7 percent. It is interesting to point out again that these three counties are the counties with one or more institutions of higher education within their boundaries.

Returning to Table 26 and the projections of college enrollments for the eight-county area, it would appear quite reasonable to assume that in this group of counties, the percentage of college-age youth attending will also continue to rise during the next two decades. The four estimates made for 1965 are based on the same number of college-age youth, but are calculated on the basis of four different percentages of college-age youth attending college that year. Assuming that only 26.5 percent of the college-age youth of the eight counties would attend, yields a total of 14,797 college enrollees from this area. If the percentage were to be 30, then there would be about 16,751; if the percentage were 35, then the total would be 19,542; and if the rate of attendance would be 40 percent, then the number of college enrollees from the eight counties in 1965 would be 22,334.

For 1970, there are two estimates made, one at the rate of 30 percent of the college-age, the other at the rate of 40 percent. If 30 percent of the college-age attended college, then there would be 18,996 enrollees from this area; if 40 percent would attend, then the number of enrollees would be 25,328.

Similarly, two projections are made for 1975. In that year, there would be 21,750 college enrollees from this area if 30 percent of the college-age attended, and there would be 29,000 enrollees if 40 percent attended.

The discussion of the preceding paragraphs may be summarized by saying that the eight-county area should anticipate between 16,000 and 22,000 college enrollees for 1965; between 19,000 and 25,000 for 1970; and between 21,000 and 29,000 for 1975. Again, emphasis should be given to the fact that these estimates will vary primarily as a result of two factors: (1) the percentage of college-age youth who will actually decide to attend, and (2) the nature of the in- and out-migration which this area will experience during the coming years.

One or two comments appear to be pertinent regarding these two factors. It is very possible that the percentage of college-age youth who will wish to attend college from this area will continue to rise as a result of increasing interest in college attendance by our youth. We should recognize, however, that this percentage would probably increase much more certainly and rapidly in the event that a state, degree-granting college is established in this geographical region. One may base this conclusion on the various studies which have been made here in Michigan and in other states on the relationship of college attendance and proximity of institutions.

On the factor of in- and out-migration, the past trends of in-migration gains in this area, and the general diversification of business and industry in several of the counties would lead to the conclusion that, at worse, the net migration in these counties would be zero. Actually, it would seem more reasonable to assume that these counties would continue to gain population as a result of in-migration.

Assuming that the discussion of the preceding two paragraphs has validity, it would seem reasonable to anticipate enrollment levels for these eight counties to be considerably higher than the lower of the two figures cited above.

Using Projections of High School Graduates

Another approach to the problem of projecting college enrollments for the state or the eight-county area is by using data on the percentage of high school graduates who will go to college. In order to make such a computation, one must first project the number of high school graduates that might be expected during any period and apply the estimated percentages to these figures.

Of course, the first problem is to establish the expected percentage of high school graduates who will be attending colleges and other post-high school institutions. Data on this are generally not available except where special studies have been conducted. For this area no such studies, of sufficient breadth, have been conducted to provide useful data on this question. Therefore, as part of the present survey, data were gathered which would shed light on this question. Questionnaires were administered to several thousand students and parents in the eight-county area. Among the dozen or more questions which were posed, one asked the 10th and 12th grade students to indicate how certain they were of going into specialized training or college work after high school. Table 28 summarizes the student responses to this question. According to this table, over 56 percent of the students responding to the question are "very certain" or "fairly certain" or going on. Only 20.7 percent definitely have no intention of going on at this point, and 21.9 percent indicated that they did not know at this time.

On another question, the 10th and 12th grade students were asked, "How far in school do you plan to go?" Also, the parents of these students and the parents of 2nd grade students were asked, "In general, how far in school do you want your child to go?" The responses to this question are summarized in Table 29. For the 10th and 12th grade students, 43.1 percent said that they planned on going through college or going through college plus an advanced degree. One-third of the responses indicated school attendance only through high school.

Although this point will be discussed again, it should be pointed out that a fairly large proportion of the students, 17.9 percent, look toward some type of technical or business training. So, the data indicate that 61 percent of the respondents have some sort of plans for education beyond the high school level.

The responses of the parents of these students are of about the same order. Thus, 50.7 percent of them see their children going through college or even beyond. Twenty-two percent see their children going on to some sort of technical or business training. And, only 23.9 percent see their children completing only high school. The results are very much the same for the parents of children currently in the second grade.

Table 28. High-School Student Expression of Certainty About Education Beyond High School, 10th and 12th Graders.

Level of Certainty	Number Responding	% of Total Responses
Very Certain	2,394	30.9
Fairly Certain	1,981	25.5
No Intention of Going On	1,606	20.7
Don't Know	1,701	21.9
No Response	73	0.9
Total:	7,755	100.0

Table 29. Plans Relating to College Attendance of Students and Their Parents in the Eight-County Area.

Level	Parents of 2nd Grade Students		Parents of 10th & 12th Grade Students		10th and 12th Grade Students		Total of Parents	
	No.	%	No.	%	No.	%	No.	%
Through High School	854	18.7	1,195	23.9	2,578	33.3	2,049	21.4
High School + Technical or Business Training	888	19.5	1,116	22.3	1,389	17.9	2,004	21.0
Through College	2,317	50.8	2,155	43.1	2,589	33.4	4,472	46.8
College + Advanced Degree	319	7.0	381	7.6	753	9.7	700	7.3
Other (Blanks, etc.)	181	4.0	158	3.2	443	5.7	339	3.5
Totals:	4,559	100.0	5,005	100.0	7,752	100.0	9,564	100.0

Among these, too, there is a high level of expectency about college and/or other education beyond high school.

Another bit of supporting evidence that there exists, among the high school students, is an increasing desire for education beyond the high school which can be obtained by considering the number of individual students who have made requests for a transcript of their record to be sent out from the high school pupil personnel offices. Data on this were obtained from four high schools in the Grand Rapids area for 1935, 1951, 1955, and 1959. Table 30 summarizes these data. It is clear that in each of the high schools the number and percentage of individuals requesting transcripts to be sent out have risen during the past twenty-four years. It should be pointed out, of course, that not all of these requests are for college-bound students, but the fact remains that even if this is taken into account, the increases are still evident.

On the basis of these preceding tables, summarizing responses of students and parents to questions about college plans, and the data on transcript requests from the high schools of Grand Rapids, it seems quite reasonable to assume that, on the average, 55-60 percent of the high school graduates from the eight-county area could be expected to seek education beyond the high school during the next ten or fifteen years.

This section of the report has dealt with projections of populations, college-age youth, high school graduates, and finally, with projections of the number of college enrollees for the state of Michigan and for the eight-county area. From the data of the tables presented,

Table 30. Trends in Requests Made by Grand Rapids High-School Seniors for Transcripts of Their Records

	1935			1951			1955			1959		
	No. of Graduates	No. Requesting Transcripts	%	No. of Graduates	No. Requesting Transcripts	%	No. of Graduates	No. Requesting Transcripts	%	No. of Graduates	No. Requesting Transcripts	%
Creston	165	15	9.1	216	50	23	237	65	27	284	155	55
Central	205	27	13.1	178	25	14	213	111	52	176	139	79
Ottawa Hills	182	74	41.0	168	104	62	183	98	54	230	181	79
Union	-	-	-	230	65	28	235	80	34	332	148	45

it may be confidently predicted that (1) there will be significant increases in the number of college-age youth in the state and in the eight-county area, (2) there will continue to be an increase in interest, on the part of young people and their parents, in education beyond the high school, and (3) there will be a resulting increase in the number of college students in the state and in the eight-county area.

More specifically, by 1970, the state may well expect an increase in the number of college-age youth to something over 600,000 and by 1975 to a level above 700,000. This will result in an increase in college enrollments for 1970 by about 80 percent, and by 1975 the enrollments will have more than doubled over 1957 levels.

For the eight-county area, the number of college-age youth will rise to over 63,000 in 1970, and over 72,000 by 1975. Compared to 1957 college enrollments from this area, by 1970 the number of college enrollees from the eight-county area will have doubled, and by 1975 it will be two-and-one-half times as large as it was in 1957.

CHAPTER IV

THE NEW COLLEGE

The preceding two chapters have presented certain data regarding the economic status of the eight-county area and the state. Data were also presented on population trends and projections for the state and the area. Finally, projections were made of the number of college enrollees to be expected from the eight counties and for the state as a whole.

Present Higher Education Facilities

It is the purpose of this chapter to describe briefly the present level of higher education service for students from the eight-county area, and to relate this to the services rendered by all of the colleges and universities in the state. Finally, based on the college enrollment projections made in the preceding chapter, a comparison will be made of the higher education needs of the eight-county area for the next two decades with the expected level of service to be provided by the presently existing colleges and universities as they plan for future expansion.

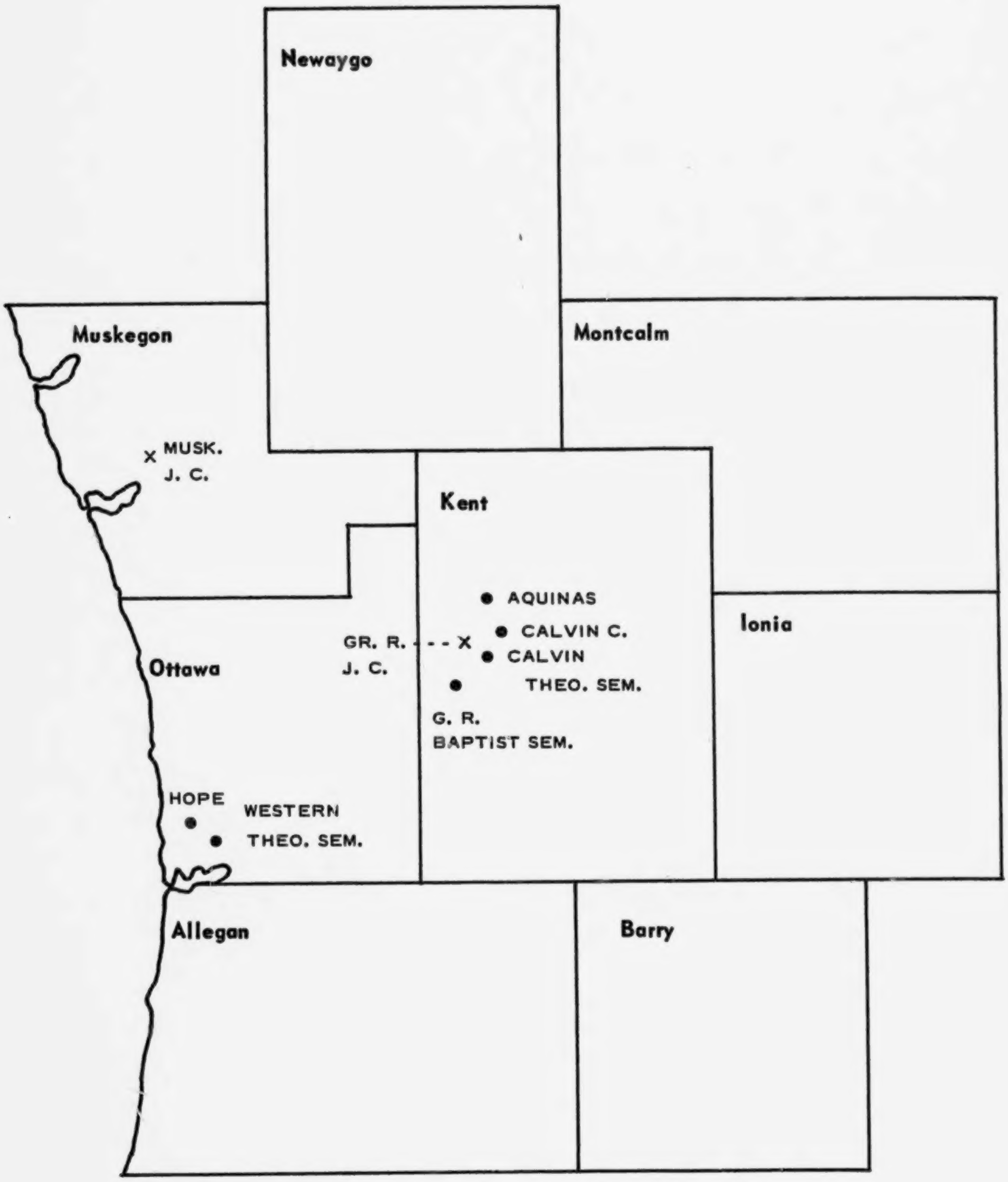
The eight-county area included in this study accounts for approximately 10 percent of the population of the state of Michigan. The eight counties, however, accounted for less than 8 percent of the college enrollees in the colleges of the state during 1957. The institutions of higher education located in this area are either community colleges or private institutions (See Figure 2). In 1958, they enrolled 7,744 of the 143,962 students enrolled in Michigan institutions of higher education. This was 5.37 percent of the total.

There are no state-controlled institutions of higher education in this eight-county area. There are two community colleges, one located at Grand Rapids and the other located in Muskegon. Grand Rapids Junior College, established in 1914, has a long tradition of quality educational service to the youth and adults of the community. Through the years, it has successfully provided for the educational needs of large numbers of local individuals The college has programs, consisting of daytime and evening courses, which can be classified as (1) freshman and sophomore liberal arts curricula, (2) technical curricula, and (3) the community service offerings.

Muskegon Community College, located in Muskegon, Michigan, was founded in 1926 as a junior college. Its designation was changed to a community college in 1951. The program of the college consists of freshman and sophomore course work taken mainly by students intending to transfer to four-year, degree granting institutions; the college also offers evening college work with a vocational and cultural emphasis, and provides vocational and terminal programs for students in a variety of areas.

In the city of Grand Rapids there are several privately controlled institutions of higher education. Aquinas College is a coeducational, liberal arts college which grants the bachelor's degree. The college was established in 1923 by one of the Roman Catholic orders. During the past several years, its enrollment has been moving toward the 1000 mark.

Grand Rapids Baptist Theological Seminary and Bible Institute is also located in the city of Grand Rapids. It is coeducational, and grants


Newaygo
Muskegon
Montcalm
MUSK. J. C.
Kent
AQUINAS
CALVIN C.
CALVIN THEO. SEM.
GR. R. J. C.
G. R. BAPTIST SEM.
Ionia
Ottawa
HOPE
WESTERN THEO. SEM.
Allegan
Barry

X = COMMUNITY COLLEGE

● = PRIVATE COLLEGE

FIGURE 3 - - INSTITUTIONS OF HIGHER EDUCATION IN THE EIGHT-COUNTY AREA REPRESENTED BY THIS STUDY.

the bachelor's degree in theology and Bible study. During the past several years it has enrolled less than 200 students.

Also located in the city of Grand Rapids is Calvin College and Calvin Theological Seminary Calvin College was established in 1876. Its enrollment has been increasing steadily, exceeding the 2000 mark in the fall of 1959. The Seminary grants the bachelor's degree in Theology. The College is coeducational and grants the bachelor's degree It is controlled and supported by the Christian Reformed Church.

At the present time, Calvin College is in the midst of a major, long-range plan which will eventually result in the moving of all or most of the college activities to a new campus located in the southeast section of the city. The new site, consisting of 160 acres, has already been purchased. Building of the new seminary, on this new site, was begun in the fall of 1959.

The other institution of higher education in this eight-county area is Hope College located in Holland, Michigan Hope College is a liberal arts college granting the bachelor's degree. It is coeducational. It is controlled and supported by the Dutch Reformed Church. During the past several years, the enrollments of Hope College have been well above the 1000 mark.

The level of present service in higher education in the eight-county area may be characterized in several ways The percentage of college-age youth attending college at any one time is probably one of the most revealing statistics in this regard. In Table 27, data were presented showing the percentage that college-age youth attending college from each county were of the college-age youth of that county. Where the total for the state of Michigan was about 29.3 percent, the total for the eight-county area was 24.1 percent. More important than this is the fact that only three of the counties, Kent, Muskegon, and Ottawa, showed percentages above twenty. The percentages for Newaygo (13.0), Barry (15.8), Allegan (16.8), Montcalm (16.4), and Ionia (17.1) must be judged as very low. To restate a point, they are the counties of this group of eight in which there is now no institution of higher education, and furthermore, no institution readily accessible for which the students would not be required to pay out-of-district fees as for the community colleges, or be limited in other ways either by economic barriers or factors beyond their control. One must be led to the conclusion that, apparently, the opportunity for higher education does not seem to be equally distributed in the several counties of this area.

Table 31 summarizes data showing enrollments in the colleges of the eight-county area for 1955-56 and 1958-59. These data are obtained from U. S. Office of Education reports, and represent all degree-credit students enrolled in these institutions. In some instances, the enrollment shown in this table is lower than enrollments for the institutions which include all types of course enrollments, such as evening college and noncredit work.

The table illustrates several factors rather clearly. First, the enrollments in the colleges located in the eight-county area have increased by a significant 36.7 percent since 1955. That is for the institutions as a group. However, the increases in enrollments have varied among institutions.

Table 31. Enrollments of Institutions of Higher Education in the Eight-County Area, 1955-1958.

Institution	1955-56 Enrollment			1958-59 Enrollment No.	Per Cent Increase, 1955 to 1958
	Total No.	From Michigan No.	Foreign & Out-of-State No.		
Aquinas	737	717	20	842	14.2
Calvin (Incl. Sem.)	1,768	991	877	2,012	14.3
Hope	1,017	648	369	1,207	18.7
Grand Rapids Baptist Seminary	184	134	50	160	-
St. Joseph Seminary	43	43	0	41	-
Grand Rapids Junior College	1,094	1,064	30	1,501	37.2
Muskegon Junior College	722	722	0	981	35.9
Total:	5,665	4,319	1,346	7,744	36.7
Total for All Colleges and Universities in the State	124,024	101,791	22,233	143,962	16.1
Per Cent these College Enrollments are of State Total:	4.57	4.24	6.05	5.37	-

Source: U. S. Office of Education.

The two community-junior colleges in the area have experienced the highest level of increase, while the three private colleges experienced an increase about half the size of that for the community colleges. It must be pointed out, however, that the increases in the private college enrollments in this area were very similar to the enrollment increase for all colleges and universities in the entire state, namely 16.1 percent.

Second, for the year 1955-56, the table also summarizes the institutional enrollments in terms of out-of-state and Michigan residents. Thus, for the two community colleges, a very small percentage of the service is in terms of out-of-state students. The situation is quite different for two of the private colleges, Calvin and Hope. Of the 1768 students enrolled in Calvin in 1955-56, 877 came from out-of-state; at Hope College, of the 1017 students enrolled in that year, 369 came from out-of-state. The proportion of out-of-state enrollments at Aquinas was very similar to that in the community colleges in the area.

Third, the table shows that the total enrollments in these institutions rose from 5665 in 1955-56 to 7744 in 1958-59. The rate of increase indicated by these figures is over twice the rate of increase experienced in all of the colleges and universities of the state. Specifically, in 1955-56, the total enrollment of the eight-county institutions was 4.57 percent of the Michigan total. In 1958-59 this percentage had risen to 5.37, demonstrating an increasing service in higher education by these colleges.

Table 32 presents data showing the percentages that college enrollees from the eight-county area were of enrollments at the colleges located in

Table 32. Percentage that Students from the Eight-County Area, Public and Private, Were of Enrollments in Institutions in the State, 1955-56.

Institution	Total Enrollments* in 1955	No. of Students from the Eight-County Area	Percentage that 8-County Students Were of Enrollments In Each Type of Institution
Grand Rapids Junior College	1,098	1,019	92.8
Muskegon Junior College	722	695	96.3
Hope	928	559	60.2
Calvin	1,568	822	52.4
Aquinas	770	513	66.6
Total, All Institutions in Eight-County Area	5,086	3,608	70.9
All State-Controlled Institutions	78,188	4,752	6.1
All Privately Controlled Institutions	32,242	2,478	7.7
Community Colleges	13,594	1,718	12.6
All Institutions in the State	124,024	8,948	7.2

* Source: U. S. Office of Education.

the eight-county area and of the total enrollments for the several types of public and private institutions in the state of Michigan.

In 1955-56, of the 5,086 students enrolled in the colleges of this area, 3,608 of them, or 70.9 percent, came from one of these eight counties. These percentages vary considerably for the individual institutions in the area. For example, over 90 percent of the enrollees in the two community colleges come from within these counties. But, the enrollments of the three larger private colleges in this area, except perhaps for Aquinas, are very nearly split half-and-half between students from the eight counties and students from outside of these counties. This simply emphasizes that there appears to be a difference in the institutional conception of geographical service to students. This may be particularly noted in the case of Calvin College which, although it provides a variety of educational services to the immediate locality, does have a commitment of higher educational service to its church membership throughout the country. In all probability, it seems safe to assume that these private colleges will continue to render similar service to the area and to their constituency in the future.

Table 32 points out another interesting relationship, namely, the percentage that the college students of this eight-county area are of the total enrollments for the various types of institutions in the state of Michigan. Thus, there were 4,752 students from this area enrolled in the state-controlled institutions in 1955-56. This was 6.1 percent of the total enrollments of these institutions, 78,188. The 2,478 students from this area enrolled in private colleges of the state were 7.7 percent of the 32,242 students enrolled in all privately controlled colleges in Michigan. And, the 1,718 students enrolled in community colleges from this area were 12.6 percent of the 13,594 students enrolled in community colleges in 1955-56. Finally, the 8,948 students from this area enrolled in all of the institutions of higher education in Michigan were 7.2 percent of the 124,024 students enrolled in all Michigan colleges and universities. Although similar figures are not available for other years for the state of Michigan, it appears safe to assume that these percentages will probably not change materially in the future, except that the percentage of total state enrollments in community colleges may rise even higher than it is now.

Level of Anticipated Service and Need

As was indicated above, one way to make a judgment regarding the need for additional colleges in this area would be to compare the level of anticipated service by the presently existing colleges and universities of the state and compare that with the projections of enrollments made for the eight-county area. Such a comparison is made in Table 33 and Table 34.

In 1957, for the Legislative Survey of Higher Education, the colleges and universities of the state were asked to estimate their level of enrollments for 1965 and for 1970. A similar request was made for this study. The totals of these estimates for the three types of institutions in the state are given in Column 2 of each of the tables. For example, the state-controlled institutions, as a group, estimated their enrollments

Table 33. Comparison of Projected Enrollments from the Eight-County Area and the Levels of Anticipated Service by Presently Existing Institutions in Michigan, 1965

(1) Institution	(2) Projected Enrollments for 1965	Percent Increase Over 1957	Percent That 8-Co. Enroll. Were of Total State Enroll. in 1955	(3) 1955 Percentage of This Total Enrollment	(4) Projected Enrollment from 8-County	(5) Excess of Column (4) Over Column (3)
State-Controlled Institution	130,025	40	6.1	7,931		
23 Privately-Controlled Institutions	45,150	56	7.7	3,476	21,000	6,000
14 Community Colleges	26,674	40	12.6	3,360		
Total:	201,849	40.1	7.21	14,760		

Table 34. Comparison of Projected Enrollments from the Eight-County Area and the Levels of Anticipated Service by Presently Existing Institutions in Michigan, 1970.

(1)	(2)		(3)	(4)	(5)
	Projected Enrollment	% Increase Over 1957	1955 % of This Enrl.	Projected Enrollment from 8-Co., 1970	Excess (4) Over (3)
State Controlled Institutions	170,175	73	10,380	24,000	5,000
23 Privately Controlled Institutions	55,450	93	4,269		
14 Community Colleges	36,347	90	4,579		
	261,972	82.9	19,128		

for 1965 to total 130,025 and for 1970 to be 170,175. The total of anticipated enrollment levels for all of the colleges and universities for the state are 201,849 for 1965 and 261,972 for 1970. It should be emphasized that these totals are totals of enrollment estimates made by individual institutions, and are, therefore, based, in most cases, on additional considerations than those employed in this study to make enrollment projections for the entire state and for the eight-county area. The institutional estimates included the criterion of adequate facility and staff, whereas the projections of the study were based mainly upon student demand for higher education.

Assuming that the figures in Column 2 of Tables 33 and 34 represent the estimates of students to be served by our colleges and universities, then a calculation was made to estimate the number of college students who would be taken care of within these figures, if the enrollments of the colleges and universities were to take in approximately the same percentage of eight-county students in 1965 and 1970 as they did in 1955. Column 3 shows the results of these calculations. For example, in 1955 the students from the eight-county area enrolled in the state-controlled institutions were 6.1 percent of the total enrolled in those institutions. Assuming this same percentage for 1965, the state-controlled institutions would be able to enroll about 7,931 students from the eight-county area, and in 1970 they would be able to enroll about 10,380.

Using the same assumption, the privately controlled institutions would be able to enroll 3,467 students in 1965 and 4,269 students in 1970; while the community colleges would be able to enroll 3,360 students in 1965 and 4,579 students in 1970. Or, of the total 201,674 students estimated by the colleges and universities for 1965, 14,760 would come from the eight-county area in 1965; in 1970, of the 261,972 that the colleges estimated they could serve, 19,128 would come from the eight-county area.

Using these calculations of students who could be served, and comparing them with the projected college enrollees from the eight-county area, one is able to compute the number of students who will be seeking a college education but for whom there will evidently be no facility available. Taking from Table 26 a projection of 21,000 college enrollees from the eight-county area for 1965, and 24,000 for 1970, and comparing these with the estimates of service indicated in Table 33 and Table 34, one is led to the conclusion that in 1965 there will be an excess of about 6,000 college students from the eight-county area seeking a higher education for whom no facility will be available, and about 5,000 college enrollees in 1970 from this area for whom no facilities will be available.

It should be emphasized again that, in all probability, these are conservative estimates in view of the fact that the enrollment projections of this study are based on certain percentages of college-age youth attending college in the future years. It would seem reasonable to assume that in the event that greater opportunity for higher education is brought into the eight-county area, the percentage of college-age youth attending from this area will increase. Furthermore, it should be pointed out that the enrollment estimates of the institutions for 1965 and 1970 actually represent monumental achievements, for they represent, in reality, increases ranging from 70 percent for the state-controlled institutions to over 90 percent for the privately controlled and community colleges by 1970.

Local Demand for Higher Education

Data gathered for this survey from parents and students in the high schools of the area would also substantiate the notion that the above are conservative estimates of 6,000 and 5,000 students seeking higher educational opportunity for whom no facilities may be available. Table 35 shows enrollment projections from the eight-county area made on the basis of student responses in 1959 to the question, "How certain are you of going into specialized training or college work after high school graduation?" Using the percentages of students who replied to each level of certainty, and the projections of college-age youth made for the area in Capter III, it is possible to obtain the estimates shown in Columns 3, 4, and 5 of the table. Thus, assuming that there will be approximately 55,837 college-age youth in the eight-county area, and using the percentages of current 10th and 12th grade students who said that they are "very certain" or "fairly certain" or going on beyond high school, a figure of over 17,000 would be certain to attend in 1965 and over 14,000 would be in the "fairly certain" category. This would yield a maximum total of over 31,000 college enrollees from the area. The fact that the "fairly certain" category is included in this sum would tend to make it as high as it is, and about ten thousand higher than the estimate of 20,000 made in the preceding chapter. In any event, the data of

Table 35. Projection of College Enrollees from the Eight-County Area, Based on High School Student Expression of Certainty about Education Beyond High School, (10th and 12th graders), 1959.

(N=7755)

Level of Certainty	Per Cent of Total Responses	Enrollment Projections for:		
		1965 (Assume 55,837 College-Age)	1970 (Assume 63,320 College-Age)	1975 (Assume 72,500 College-Age)
1. Very Certain	30.9	17,254	19,566	22,402
2. Fairly Certain	25.5	14,238	16,147	18,488
3. No Intention of Going On	20.7	11,558	13,107	15,007
4. Don't Know	21.9	12,228	13,867	15,877
5. No Response	0.9	503	569	652

this table would lend credence to the supposition that there would quite easily be 6,000 students in 1965 and 5,000 in 1970 seeking higher education for whom no facility would be available. The fact appears that it would be logical to expect the figure to be quite a bit higher.

Using additional data gathered for this study, it is possible to present information as to the level of education which students in the eight-county area are now looking forward to. Table 36 summarizes the responses of eight-county high school students to the question, "How far in school do you plan to go?" The table also computes the number of students who might be expected at each of these levels, if we assume that the percentages shown in the table for the 10th and 12th graders of 1959 would apply in the future.

Specifically, in response to the question of how far in school do they plan to go, 33 percent of the 10th and 12th graders said "through high school, 18 percent said "high school plus technical and business training,' 33 percent said "through college, 10 percent said "college plus advanced degree,' and there was no response from 11 percent of the students. In other words, about 18 percent of the respondents plan on some education beyond high school in the form of technical or business training. If we were to assume that this percentage would remain about the same in the future, we might expect about 10,050 such students in 1965; 11,397 such students in 1970; and 13,050 such students in 1975. These, then, would be the students who would be seeking post-high school education beyond the high school level in the form of community and junior college offerings as well as in business and technical institutes.

Table 36. Projected Enrollments at Various Levels of Education Based on Student Responses from the Eight-County Area.

(N = 7755)

Level of Education	Per Cent Anticipating This Level	No. at This Level, Assuming 55,837 College-Age in 1965	No. at This Level, Assuming 63,320 College-Age in 1970	No. at This Level, Assuming 72,500 College-Age in 1975
Through High School	33	18,426	20,895	23,925
High School plus Technical and Business Training	18	10,050	11,397	13,050
Through College	33	18,426	20,895	23,925
College plus Advanced Degree	10	5,584	6,332	7,250
Uncertain or No Response	6	3,350	3,799	4,350

Of the respondents, 33 percent indicated a desire to go through college and another 10 percent indicated plans for college plus an advanced degree. If these percentages are assumed to hold for the future, we would expect about 23,000 college enrollees from this area in 1965; approximately 27,000 in 1970; and about 31,000 in 1975. It is interesting to compare these figures with the estimates shown in Table 26 where the projections, assuming 40 percent of college-age youth attending college, turned out to be 22,334 for 1965; 25,328 for 1970; and 29,000 for 1975. Of course, when the figures of Table 36 for all of post-high school education are added together, then one obtains estimates considerably higher than those of Table 26. It must be remembered, however, that the projections of Table 26 are based on a 40 percent rate of college-age youth attendance. The figures of Table 36, of course, assume a considerably larger percentage of college-age youth seeking post-high school education than the 40 percent.

The data of Table 36 would: (1) substantiate a relatively high level of college attendance expectancy and (2) indicate that the eight-county area should give considerably more attention to the expressed desires for technical and business training by the high school students in these counties. The latter point would have implications for the establishment of additional community colleges in this area with particular emphasis upon technical-terminal programs. If, indeed, 18 percent of the 10th and 12th grade students in the high schools of the area aspire to technical and business training, this would mean providing facilities for such education for about 10,000 of them in 1965, 11,000 in 1970, and about 13,000 in 1975.

Another indication of the potential need for community-junior college facilities is obtained from the following question asked 10th and 12th grade students in the eight-county area: "There are now fully accredited community or junior colleges in this area. How certain would you be to attend one of these?" Table 37 summarizes the percentage of students responding to each degree of certainty. Of the 7755 students who completed the questionnaire, 12 percent indicated that they feel "very certain" about attending one of the community or junior colleges; 14 percent said that they would "probably attend". Again, if these percentages are applied to the projected number of college-age youth in 1965, 1970, and 1975, estimates may be made of the numbers of students who may be looking to community and junior college attendance.

Thus, for 1965, using only the "very certain" responses, approximately 6,700 young people might be expected to attend community colleges in the area; in 1965, the number would be about 7,598; and in 1975 the number would be about 8,700. At the present time, the two community colleges in this area are enrolling less than 3,000. A projected enrollment of 6,700 by 1965 would represent a doubling of community-junior college enrollments from the eight counties. By 1975, there would almost be a tripling of enrollments in community-junior colleges.

Considering the fact that the two established community-junior colleges in the area -- Grand Rapids Junior College and Muskegon Community College -- will expand their facilities for students in their immediate areas, one is still faced with the need for such facilities in other sections of the eight-county area. It appears reasonable

Table 37. Estimates of Students Who Would Attend Community Colleges in the Eight-County Area, Based on Student Responses in 1959 to the Question of Certainty of Attending Such a College.

(N = 7755)

Degree of Certainty	Per Cent at This Level	No. at This Level, Assuming 55,837 College-Age in 1965	No. at This Level, Assuming 63,320 College-Age in 1970	No. at This Level, Assuming 72,500 College-Age in 1975
Very Certain to Attend	12	6,700	7,598	8,700
Probably Attend	14	7,817	8,864	10,150
Uncertain	32	17,867	20,262	23,200
Probably not Attend	21	11,725	13,297	15,225
Certain not to Attend	18	10,050	11,397	13,050
No Response	3	1,675	1,899	2,175

to suggest the possibility of community-junior college development either in the Holland or Grand Haven area, for example.

Answers to a similar question, designed to provide information about the certainty with which 10th and 12th grade students would plan to attend a four-year, degree-granting institution if it were established in this area, are summarized in Table 38. The question asked was, "If a four-year, state-supported college, within driving distance, say near Grand Rapids, were established, how certain would you be to attend such a college?"

Of the 7755 respondents to the questionnaire, 9.8 percent said that they felt "very certain" about attending and 20.4 percent said that they would "probably attend". Assuming that these same percentages would hold for 1965 and 1970, it is possible to estimate the number of students, from the eight-county area, who would be interested in attending a four-year college if it were located within driving distance.

Thus, for 1965, such an assumption would yield over 6,000 students interested in attending a local college, and a total of more than 7,000 in 1975. These estimates are based on the projection of 21,000 college enrollees from this area for 1965, and 24,000 in 1975 as shown in Table 26. In all probability, the number of local students who would attend such a college could be considerably higher than the 6,000 and 7,000 when one considers that in Table 38 there are over 7,000 students who said that they were "uncertain" as to whether they would attend such a college or not. It is highly probable that quite a few of these would decide to attend once the institution was actually in existence.

Table 38. Students' Expressed Certainty of Attending a Four-Year State-Supported College, If One Were Established in the Grand Rapids Area.

Level of Certainty	Percentage of Students	No. of Students This Would Be Assuming Projection of 21,000 College Enrollees From This Area, 1965	No. of Students This Would be Assuming Projection of 24,000 College Enrollees From This Area, 1975
Very Certain	9.8	2,058	2,352
Probably Attend	20.4	4,284	4,896
Uncertain	35.7	7,497	8,568
Probably not Attend	16.4	3,444	3,936
Certain not to Attend	13.7	2,877	3,288

Cross-tabulation of data obtained from parents and their children in the 10th and 12th grades provides a means of checking the stability and consistency of the responses. For example, both the parents and the students were asked the question regarding the level of education to which they aspire. Table 39 summarizes the responses to this question.

From the total sample of 10th and 12th grade students and their parents, there were 4,663 which represented members of the same family. Of these, 2,706 contained identical responses to the question regarding the level of educational aspiration. Probably the most important point to note from this table is the fact that of the 4,663 paired questionnaires, 30.9 percent indicate a desire for going through college or going through college plus an advanced degree. This figure would suggest that the rates of 35 percent and 40 percent, shown in Table 26, of the college-age youth in the eight-county area looking toward college attendance, is a very realistic one. In fact, these may be rather conservative percentages when and if the new college becomes a reality.

One other point should be noted in Table 39, namely, that of the paired questionnaires. There are 9.4 percent of the responses indicating a desire for high school plus technical or business training. This figure would further support the need for continued offerings of such terminal courses in the eight-county area.

Distinguishing Between Demand and Need

The preceding tables, which have summarized parent and student responses to the level of expected education and the certainty of going

Table 39. Comparison of Parents' and Students' Responses to the Level of Educational Aspiration.

Level of Education	Number of Parents	Number of Students	Number of Identical Responses	Per Cent of Identical Responses (N=2706)	Per Cent Total Identical Pairs of Questionnaires (N=4663)
Through High School	1,119	1,467	819	30.3	17.6
High School Plus Technical or Business Training	1,043	811	437	16.1	9.4
Through College	2,014	1,676	1,263	46.7	27.1
College plus Advanced Degree	346	482	180	6.6	3.9
Other, No Response, etc.	28	97	7	0.3	0.1
Total:	4,663	4,663	2,706	—	58.1

Note: These numbers represent the responses of paired questionnaires only.

to post-high school institutions, represent, in reality, the existing demand for higher education by these individuals. It is evident from the tables that the demand in this area certainly warrants giving serious considerations to the possibility of providing additional facilities for education beyond the high school. At the same time, however, an important consideration must be the need for higher education as manifested not only by the demand but by the actual ability of those seeking higher education to benefit by it. That is, the demands for higher education must also be assessed in terms of the abilities and interests of those expressing the desire for such opportunity as well as reflecting the needs of our society.

The data compiled for this survey permit drawing certain conclusions about this problem. Not only were the students and parents asked to indicate their desire for further education beyond the high school, but data were gathered regarding the ability levels of the students responding, both in terms of ability test scores and rank in graduating class for the 12th graders. Table 40 presents the data on this point. The table shows the students' responses to the question of how far in school they intend to go, and also shows the ability levels for the respondents for each of the levels. Table 41 shows the student responses to the question of certainty of attending a four-year, state-supported college, if one were established in this area, relating these responses to the ability levels of the respondents.

The data of Table 40 give additional support to the use which was made of data indicating student expectations for attending college, and

Table 40. Comparison of Level of Educational Aspiration of Students with Their Measured Ability, (Otis, ACE).

How Far in School do You Plan To Go?	Ability -- Quintile Rank											
	Top Quintile		4th Quintile		3rd Quintile		2nd Quintile		Lowest Quintile		Total	% of Total
	#	%	#	%	#	%	#	&	#	%		
1. Through High School	41	11.8	40	11.6	66	19.1	72	20.8	127	36.7	346	30.9
2. High School Plus Technical or Business Training	22	10.5	38	18.3	40	19.2	57	27.4	51	24.5	208	18.6
3. Through College	64	15.3	116	27.8	104	24.9	80	19.1	54	12.9	418	37.4
4. College Plus Advanced Degree	30	24.9	38	31.7	31	25.8	14	11.7	7	5.8	120	10.7
5. Other, Blank, etc.	3	11.5	9	34.6	6	23.0	5	19.2	3	11.5	26	2.3
Total	160	13.6	241	20.4	247	20.9	228	19.3	242	20.5	1118	

Table 41. Comparison of Certainty of Attending Local, 4-Year College and Measured Ability of Students, (Otis, ACE).

Level of Certainty	Ability - Quintiles											
	Top Quintile		4th Quintile		3rd Quintile		2nd Quintile		Lowest Quintile		Total	Per Cent
	#	%	#	%	#	%	#	%	#	%		
1. Very Certain to Attend	35	17.0	47	22.9	55	26.8	38	18.5	30	14.6	205	18.8
2. Probably Attend	40	15.1	55	20.8	55	20.8	65	24.5	50	18.9	265	24.3
3. Uncertain	54	15.1	76	21.3	81	22.8	67	18.8	78	21.9	356	32.7
4. Probably not Attend	17	11.9	35	24.5	30	20.9	25	17.5	36	25.2	143	13.1
5. Certain not to Attend	15	12.5	20	16.7	22	18.3	26	21.7	37	30.8	120	11.0
Total	161	14.8	233	21.4	243	22.3	221	20.3	231	21.2	1089	

college enrollment projections based on these indications. Test results were available on only a limited number of the respondents to the student questionnaire. Of the 7744 students who completed the questionnaire, ability test data were available on only about 20 percent of them. Furthermore, the ability test data included several types of tests, such as the Otis Test of Intelligence, the Differential Aptitude Test, and the American Council on Education Psychological Examination. The data of Table 40 are based on the students for whom scores were available from the Otis and the ACE tests.

Of the 1100 for whom such results were available, over 500 indicated that they intended to go "through college" or "through college plus an advanced degree". Again, it is seen that this is about 50 percent of the group, which is similar to the results obtained from the total group of 7744 students. Of the 538 intending to go to college, about 24 percent fall in the lower two quintiles. Put another way, of those planning to go to college, about 75 percent fall in the upper 60 percent of the ability grouping. The fact that such a proportion of those intending to go on to college at this level of measured ability, would indicate that it is very sound to give consideration to the large percentages of area youth indicating their intention to go on to college.

It can also be noted from the table that over 50 percent of those students indicating only "high school plus technical or business training" fall in the lower two quintiles of ability test scores. One might well conclude that the students themselves are revealing here some definite self-selection for going on to college.

There is a third factor which should be noted in Table 40. About one-third of the students for whom test scores were available indicated that they were simply going to finish high school. These evidence no interest, then, in going on beyond the high school level of education. Of the 346 students who indicated "through high school", over 20 percent scored in the upper two quintiles on the ability tests. Here appears to be room for more intensive counseling in the interest of motivating these young people to think about further education. The fact that the able student does not continue his education has been of increasing concern to our colleges and universities and to society as a whole. It would certainly be well to attempt to determine what the reasons may be for these able youth not planning to go on to college.

The data of Table 41 relate the expressed student certainty of attending a local, four-year college, if one were established, to the measured ability of these students. Of the almost 1,000 students for whom test data were available for this question, 470 indicated that they felt "very certain of attending" or would "probably attend" a local, four-year college if one were established. Again, it is interesting to note that only about 20 percent of this group fall in the lower two quintiles. This implies that students indicating an interest in attending a local, four-year college are generally from levels of ability which might be considered satisfactory for college attendance. In other words, the expressed interest of attending a local college, if one were established, comes from students at satisfactory college levels of ability, at least not noticeably different from levels of entering freshmen at most of our colleges.

Tables 42 and 43 present additional data related to the present discussion. Table 42 relates the expressed level of certainty with the level of educational aspiration, that is, for those who are certain to go on, what level of education are they seeking? It may be pointed out first that of the students who indicated that they are "very certain" or "fairly certain" of going on after high school, about 20 percent are interested in technical and/or business training. The remainder of this group of students indicated preference for "college" or "college plus an advanced degree". Thus, though the main preference seems to be for college, on the part of those certain or fairly certain to go, there is still quite a significant percentage looking to the type of education which is offered through community and junior colleges.

Table 43 relates the level of education aspired to by the students with the expressed certainty of attending a local, four-year, degree-granting college if one were established in this area. Again, the significant fact is that of over 3,000 who indicated "through college" or "through college plus an advanced degree," about 50 percent expressed an interest in the local college, if there were one. This, again, would seem to give confirmation to the acceptance of the proposed college.

One might naturally raise the question as to the differences of expressed interest in attending college between the boys and girls in the 10th and 12th grades. Table 44 presents data comparing the expressed certainty of going to school beyond the high school for boys and girls.

Table 42. Students' Level of Certainty Compared with Their Level of Educational Aspiration.

Certainty of Going on After High School	Through High School		H.S.+ Technical or Bus.Training		Through College		College plus Advanced Degree		Total
	#	%	#	%	#	%	#	%	
1. Very Certain	-	-	275	12.2	1,377	60.1	606	26.8	2,258
2. Fairly Certain	145	7.8	547	29.4	1,038	55.8	131	7.0	1,861
3. No Intention To Go On	1407	92.3	117	7.7	-	—	-	—	1,524
4. Don't Know	964	60.9	447	28.3	160	10.1	10	.7	1,581

Table 43. Comparison of Level of Educational Aspiration and Certainty of Attending a Local, 4-Year College, if Established.

How Far in School Do You Plan to Go?	Certainty of Attending Local 4-Year College										
	Very Certain		Probably Attend		Uncertain		Probably Not Attend		Certain Not to Attend		Total
	#	%	#	%	#	%	#	%	#	%	#
1. Through High School	46	1.9	244	9.8	941	37.9	593	23.9	657	26.5	2,481
2. High School Plus Technical or Business Training	100	7.4	318	23.4	614	45.2	211	15.4	115	8.5	1,358
3. Through College	463	18.0	790	30.8	850	33.1	301	11.7	165	6.4	2,569
4. College plus Advanced Degree	129	17.2	178	23.8	245	32.8	125	16.7	70	9.4	747
5. Other, Blank, etc.	12	7.5	30	18.8	60	37.5	23	14.4	35	21.9	160

Table 44. Comparison of Certainty of Going On to School for 10th and 12th Grade Boys and Girls.

Certainty of Going	Male		Female	
	#	% of Males	#	% of Females
1. Very Certain	1,159	30.3	1,232	32.1
2. Fairly Certain	1,021	26.7	966	25.1
3. No Intention of Going On	683	17.8	918	23.9
4. Don't Know	966	25.2	728	18.9
Total	3,829	100.0	3,844	100.0

It is clear that the percentages of boys and girls do not differ at the level of "very certain" and "fairly certain" to attend. The difference is that a larger percentage of the girls appear to have no intention of going on than the boys, but more of the boys than girls appear to be undecided about their plans.

A New College

On the basis of the data presented above -- data regarding population trends, economic and business patterns of the area, projections of college-age youth and projections of college enrollees for the eight-county area -- the Director of the Study recommends that steps be taken, at the earliest possible time, looking toward the establishment of additional facilities for higher education in the eight-county area. Specifically, first priority should be given to the planning and building of a new, four-year, and/or five-year, degree-granting college in this part of the state.

The above conclusion rests mainly on the following factors identified in the study:

(1) The continued increases expected in the population of this area. Projections estimate the increase, for the eight-county area, to be about 28 percent between 1957 and 1970.

(2) The probable increase in population by a net in-migration in the eight-county area. In the first half of the present decade, for the eight-county area, net in-migration accounted

for over 32 percent of the total population increase. Continued industrial and business diversification in this area, and the long-term effects of the St. Lawrence Seaway may be a basis for assuming a continued net in-migration for this area during the next decade.

(3) _The increase in the number of college-age youth, both in the state and in the eight-county area_. For 1965, projections made in this study place the number of college-age youth for the state at about 520,705, and for the eight-county area at about 55,837. For 1970, the projections of college-age youth for the state are 595,222, and 63,314 for the eight-county area. For 1975, the projections made by this study place the number of college-age youth for the state at 709,259, and for the eight-county area at about 72,500.

(4) _The state and the eight-county area are experiencing an increase in the percentage of college-age youth who actually go on to college_. It is possible to be more certain about the fact that the percentage of college-age youth going on to college will increase than it is to estimate what the actual increases in this percentage will be. At the present time, it may be estimated that the percentage of college-age youth attending college from the eight-county area is in the neighborhood of 25 to 30 percent. In making the college

enrollment projections for this study, the assumption has been made that this will increase to at least 40 percent by 1970. It must be noted that this percentage could be considerably higher in the event more rapid changes occur in the growing expectations for higher education on the part of students and their parents.

(5) Quite obviously, the increases in the number of college-age youth and the increases in the percentage of these youth going on to college will result in an increase in the actual number of college students enrolling in our colleges and universities. For the state of Michigan, the study projects college enrollments between 192,600 and 223,600 for 1965; between 234,000 and 281,200 for 1970; and between 277,000 and 319,500 for 1975.

For the eight-county area, the study is projecting college enrollments to be approximately 20,000 for 1965; between 19,000 and 25,000 for 1970; and between 21,000 and 29,000 for 1975. It should be pointed out that the higher of the projections for 1970 and 1975 are based on the assumption that 40 percent of the college-age youth of the area will be attending college. This assumes a very reasonable increase in the percentage of about 12 percent during the next 10-15 years.

On this basis, and other data of the survey, it seems reasonable to estimate the enrollments of a newly established college in this area at 2,500 in 1965; 5,000 in 1970; and 8,000 to 10,000 in 1975.

(6) The excess of need for higher education over the availability of facilities. Taking into consideration the anticipated levels of enrollments envisioned by the presently existing public and private colleges in the state, there appears to be an excess of the number looking toward higher education over the number who would be taken care of. On this point, one cannot be critical of the existing institutions for not planning to expand beyond what they have indicated. It must be assumed that their plans are based on realistic analyses of their resource potential.

(7) The need to provide higher education facilities well distributed geographically in the state of Michigan. The eight-county area under study here, in terms of the population and college-age growth anticipated, should be considered a most logical location for the establishment of new facilities for higher education in the state.

Determining the Program of the New College

There are several principles which should be followed in the determination of programs for an institution such as is recommended for this area:

A. The program of the institution must be basically sound educationally, a judgment which should be based on the opinions and consideration of leaders in the field of college and university curriculum. The programs of this new college should reflect the thinking of the higher-education leaders of the nation and particularly of the state of Michigan. These academic leaders in the colleges and universities of Michigan should be vitally concerned and involved in the process of evolving a curriculum for this new college.

B. The program of the institution should be developed with full cognizance of the present and future programs of the existing colleges and universities of the state. This process would involve statesman-like decisions as to areas of work which should be included in the curriculum of this new institution.

C. Whatever the future needs for degree programs may be in the state of Michigan, the programs of the new college should be developed with the conviction that its undergraduate offerings, whatever their specific nature may be, cannot be anything less than the best.

D. The programs of the college should provide for the specific business, industrial, and cultural needs of the eight-county area as well as of the state.

E. The programs of the new college should be developed with careful consideration of the expressed interests of the students in this area.

Business and Industry in the Eight-County Area

On the point of business and industrial needs of the area, two tables may suffice to illustrate the fact that, even in a brief span of time, changes have taken place in percentages of employees in various industrial groups of the eight-county area and the variety of manufacturing establishments in this region. Table 45 presents data showing the percentages of employees in various industry groups for the nation, the state, and the eight-county area. Just during the five-year period represented by the data, changes are evident in the areas of finance-real estate, wholesale trade, and contract manufacture showing increases, and general manufacturing showing a definite decline.

Table 46 presents data comparing the number of manufacturing establishments in 1947 and 1954 for the eight-county area for 19 categories of manufacture. In this table, decreases are evident in several of the categories, especially furniture and fixtures. Increases are also in evidence, especially in machinery, both electrical and non-electrical, as well as in the printing and publishing industries. If these changes are taking place, and the youth of this area are seeking technical and terminal programs, then these programs should be designed with the changes and developing emphases in mind.

Table 45. Percentage of Employees in Various Industry Groups 1st Quarter, 1951 and 1956.

	United States		Michigan		8-Counties	
	1951	1956	1951	1956	1951	1956
1. Agricultural Services, Forestry, Fisheries	0.3	0.3	0.1	0.1	0.1	0.2
2. Mining	2.4	2.0	0.8	0.8	0.3	0.3
3. Contract Construction	6.2	6.2	4.1	4.6	4.0	4.4
4. Manufacturing	42.5	41.4	57.8	54.9	58.4	56.5
5. Public Utilities	7.0	7.2	5.4	5.0	5.1	5.4
6. Wholesale Trade	7.3	7.5	5.2	5.7	5.0	5.9
7. Retail Trade	19.2	19.1	16.2	16.8	17.4	17.0
8. Finance, Insurance, Real Estate	5.0	5.6	3.0	3.6	2.7	3.2
9. Services	9.2	9.8	7.0	7.9	6.7	6.8
10. Unclassified	0.7	0.9	0.4	0.6	0.2	0.4

Source: County Business Pattern, Part 4
U. S. Department of Commerce, 1956.

Table 46. Number of Manufacturing Establishments With Twenty or More Employees in the Eight-County Area, 1947 and 1954.

Manufacturing Group	No. In 1947	No. In 1954	Numerical Change
Food and Kindred Products	63	72	+ 9
Tobacco Manufacture	2	0	- 2
Textile Mill Products	9	5	- 4
Apparel and Related Products	9	9	0
Lumber & Products, Except Furniture	18	20	+ 2
Furniture and Fixtures	90	80	- 10
Paper and Allied Products	17	18	+ 1
Printing, Publishing Industries	31	37	+ 6
Chemicals and Allied Products	10	15	+ 5
Petroleum and Coal Products	3	5	+ 2
Rubber Products	2	3	+ 1
Leather and Leather Products	12	8	- 4
Stone, Clay, Glass Products	10	8	- 2
Primary Metal Industries	31	30	+ 1
Fabricated Metal Products	71	73	+ 2
Machinery, Except Electrical	75	83	+ 8
Electrical Machinery	7	13	+ 6
Transportation Equipment	26	24	- 2
Instruments and Related Products	0	2	+ 2
Miscellaneous Manufacture	19	20	+ 1

Source: County Business Pattern, Part 4, U. S. Department of Commerce, 1956

Expressed Program Needs of Students and Parents in the Eight-County Area

In an effort to identify the kinds of professional and vocational plans that the youth and adults of the eight-county area have, the survey gathered information on this question from parents and students. Table 47 summarizes the answers to this question: "If you plan to attend college, what vocation do you plan to enter after you complete your education?" The parents were asked, "If you feel that your child might attend such a college, what type of educational programs would you expect him or her to take?"

In Table 47 are listed the vocational and professional choices of 10th and 12th grade students who indicated that they planned to go to college. Also listed are the choices of the parents of 2nd, 10th, and 12th grade students. Listed in the table are the twenty-two vocational choices which were selected most frequently. In addition to the number of times each vocation was selected, the table shows the percentage that this frequency is of the total number of responses made to this question. Also indicated are the ranks of the first nine of the choices.

Among the vocational choices indicated by the students, "teaching" ranks as a significant first. Ranking second and third are choices of "secretarial" and "nursing". Ranking fourth, sixth, and seventh are the areas of "engineering," "business administration," and "agriculture". Ranking fifth and eighth are "beautician and barber" and "auto and airplane mechanic".

The selections made by the parents of these students do not vary noticeably from the choices made by the students. The noticeable differences [illegible]ble 47. Expressed Vocational and Professional Expectations of Students and Parents

Vocation	Number and Percent Selecting this Vocation					
	10th and 12th Grade Students			Parents of 2nd, 10th & 12th Grade Students		
	#	% (N=5,780)	Rank	#	% (N=8,667)	Rank
Undecided	1,084	18.8	-	3,859	44.5	-
Accounting	107	1.9	-	133	1.5	-
Agriculture	146	2.5	8	164	1.9	7
Architecture	79	1.4	-	85	1.0	-
Art and/or Crafts	109	1.9	-	152	1.8	8
Auto-Plane Mech.	161	2.8	7	139	1.6	-
Beautician-Barber	211	3.7	5	175	2.0	6
Business Adm.	202	3.5	6	322	3.7	5
Chemist	62	1.1	-	62	0.7	-
Drafting	83	1.4	-	65	0.7	-
Electronics	121	2.1	9	150	1.7	9
Engineering	399	6.9	4	500	5.8	2
Journalism	48	0.8	-	38	0.4	-
Lab. Technician	36	0.6	-	43	0.5	-
Law	77	1.3	-	60	0.7	-
Med. Technician	43	0.7	-	57	0.7	-
Medicine	112	1.9	-	144	1.7	-
Religious Work	90	1.6	-	118	1.4	-
Music	69	1.2	-	75	0.9	-
Nursing	411	7.1	3	484	5.6	3
Science Research	65	1.1	-	115	1.3	-
Secretarial	423	7.3	2	368	4.2	4
Teaching	712	12.3	1	1,132	13.1	1

% = Percent of Total Responses

are the relatively lower rank accorded to "secretarial" and to "engineering" by the parents. Despite these differences, the indicated preferences by students and parents give emphasis to the area demand for college work in teaching, engineering, and business administration. In addition to these, there is considerable preference given to electronics, agriculture, accounting, law, and medicine.

This summary of student and parent preferences gives further emphasis to the need for technical and terminal programs for the youth of this area. The need in areas such as secretarial, nursing, and auto-plane mechanics is further substantiated by the expressed needs of adults for further education in the following section.

Table 48 presents data comparing the vocational choices expressed by 10th and 12th grade students with their indicated certainty of going on for education beyond the high school. The vocations are listed in the first column. Then, the numbers and percentages of students choosing each vocation are shown for those students who indicated "very certain" to go on and "fairly certain" to go on. Also given are the numbers and percentages of these two categories of students combined with the rank of the first ten vocations in the list. The data of this table, then, give further assurance that the areas of study being considered for the program of the new college are those for which college-bound students have expressed an interest.

Among the top ten in this group are "teaching," "engineering," "business administration," "medicine," "the ministry or religious education," "accounting," and "agriculture". Certainly these areas of interest have implications for the program of the new college.

Table 48. Comparison of Vocational Choices of 10th & 12th Grade Students and Certainty of Going to College or Specialized Training (Selected from Listing)

Vocation	Certainty of Going On to School						
	Very Certain		Fairly Certain		Total, Both Categories		Rank
	#	%	#	%	#	%	
	(N=2232)		(N=1871)		(N=4103)		
Undecided	347	15.5	413	22.1	760	18.5	-
Accounting	47	2.1	28	1.5	75	1.8	9
Agriculture	24	1.1	48	2.6	72	1.7	10
Architecture	34	1.5	33	1.8	67	1.6	-
Art and/or Crafts	30	1.3	37	2.0	67	1.6	-
Auto-Plane Mechanic	12	0.5	51	2.7	63	1.5	-
Beautician or Barber	67	3.0	65	3.5	132	3.2	6
Business Administration	90	4.0	66	3.5	156	3.8	5
Chemist	39	1.7	21	1.1	60	1.5	-
Drafting	27	1.2	33	1.8	60	1.5	-
Electronics	48	2.2	49	2.6	97	2.4	8
Engineering	225	10.1	125	6.7	350	8.5	3
Journalism	33	1.5	8	0.4	41	1.0	-
Lab. Technician	18	0.8	13	0.7	31	0.8	-
Law	48	2.2	19	1.0	67	1.6	-
Med. Technician	26	1.2	14	0.7	60	1.5	-
Medicine	80	3.6	26	1.4	106	2.6	7
Religious Work	43	1.9	35	1.9	78	1.9	8
Music	33	1.5	20	1.1	63	1.5	-
Nursing	210	9.4	154	8.2	364	8.9	2
Science Research	31	1.4	27	1.4	58	1.4	-
Secretarial	91	4.1	146	7.8	237	5.8	4
Teaching	418	18.7	236	12.6	654	15.9	1

% = Percent of All Responses

Also among the top ten are "nursing," "secretarial," and "beautician and barber". These expressed interests have implications for the types of courses to be offered those students who are seeking technical and terminal education in this area.

Of course, in judging the need for additional educational facilities, consideration must be given increasingly to the expressed needs for education by the adults of the area. In order to obtain information on this aspect of need, the parents were asked to indicate the kinds of additional education in which the parents would be interested. Table 49 summarizes the responses of the husbands and wives separately. It should be pointed out here that not all of these needs should necessarily be met by the newly planned institution. It is possible that many of the indicated interests could be provided for by the local community colleges and the high schools. Certainly, courses toward college degrees and certain technical offerings might well be given through the new college.

The table exhibits several interesting items. First, there are about 3.5 percent of the respondents interested in further work toward a college degree. In this group, this means a total of almost 1,000 people. Second, there is a large percentage of both men and women indicating no interest in further education. Very little difference is noted between the husband and wife responses to this question.

Third, almost 25 percent of the men indicated an interest in courses aimed at job improvement. This interest most probably could be met through appropriate technical and business courses.

Table 49. Additional Education in which Parents Expressed an Interest

Type of Education	Number of Husbands	Percent of Husbands	Number of Wives	Percent of Wives	Total Number	Percent
None	3,527	37.1	3,515	36.8	7,042	36.9
Work Toward College Degree	277	2.9	394	4.1	671	3.5
Courses for Job Improvement	2,333	24.5	650	6.8	2,983	15.7
Courses for Home Improvement	97	1.1	1,113	11.7	1,210	6.3
Courses for Personal Growth	912	9.6	1,474	15.4	2,386	12.5
Other	2,404	25.3	2,408	25.2	4,812	25.2
Total	9,505	100.5	9,554	100.0	19,059	100.1

Fourth, for both the husbands and the wives, a total of 2,386 indicated an interest in courses for general, personal, and cultural purposes. These needs could, to a great extent, be met through non-credit type course offerings either in the community colleges or the local high schools.

On the basis of this sample of parents who responded, it must be concluded that there exists an evident need for courses and programs designed to meet the needs of adults. The program of the new college must take these needs into account.

The Program

The recommendation that the newly established college in the eight-county area be a four-year, degree-granting institution carries with it certain implications regarding its program and curriculum. In the first place, the curriculum of the college should have for its central core a sound and meaningful liberal arts or general education program. The specific character of this aspect of the curriculum should be something which would be determined as part of the initial planning for the new college. This determination should give full consideration to data available regarding the various types of programs in liberal and general education which have been in effect in some colleges and universities throughout the country. These experiences should lead to wise decisions as to the content and placement of the general education experiences. Thus, consideration ought to be given to providing for general education experiences throughout the four years, and to provide this experience through inter-disciplinary course offerings.

In addition to this fundamental core of liberal arts education, the New College program should reflect the needs of the state and the eight-county area in business administration, teacher education, science and engineering. The data presented in the preceding section and in the Appendix tables can be of considerable use in making these determinations.

Organization

The recommendation that the new institution be a four-year, degree-granting college carries with it, of course, a further implication, one related to the entire problem of how this new college would relate to the present colleges of the area. In view of the fact that the analysis of the previous sections has considered the relationship of enrollment numbers in the private colleges, the main issue would seem to revolve around the relationships of the new college to the Grand Rapids Junior College and to Muskegon Community College. It is quite evident to most observers of the local scene that the opening of a new four-year, degree-granting institution in this area would materially affect the college-parallel programs now offered by these two community-junior colleges. Specifically, where now Grand Rapids Junior College finds it has about two-thirds of its students in the college-parallel programs, it is rather obvious that the new college would be the one to provide the major portion of such education in this area, although it must be pointed out that the four-year college does not preclude the continuation of general education courses in the community colleges.

There are, of course, several alternatives which might be considered in the organizational structure of the new college. There are three or four considerations, however, pointing toward the desirability of the plan being recommended here, namely, that the new college be a four-year, degree-granting institution, thus assuming that existing and newly planned community colleges in this area give increasing emphasis to technical and terminal courses with an adequate program of general education for students in these programs. Also, the community colleges would be continuing and extending their services to the adults of the communities they serve.

First, as indicated above, the establishment of such a new college would definitely provide for the extension of development of each of the community colleges in their unique role of terminal, technical and adult education. The rather general lack of emphasis on this role of the community college in Michigan and in several other states is rather unfortunate in that it is not providing for the post-high school education needs of large numbers of young people, and furthermore, it is not providing the technically trained personnel needed in business and industry.

Second, organizing the new college as a separate entity from the already existing community-junior colleges provides for developing the new four-year college as an institution serving a geographical area encompassing at least the eight-county area in this part of the state, rather than being characterized as a local, school district institution.

Third, the recommended organization will provide for clear independence of faculties and programs. In the instances where attempts have been made to merge degree programs with one and two-year technical-terminal programs, there have frequently been problems of faculty relations between the groups serving one program or the other.

Fourth, the recommendation carries with it the implication that the four-year, degree-granting institution be organized under a separate Board of Control. The recommendation is further made in this report that the Grand Rapids Junior College be placed under a separate Board of Control which would be responsible for and draw its support from a broad base including more than the single school district in which it is now located. In this way, the community college could serve, more effectively and adequately, the technical-terminal needs of the youth of this region.

This implied control by individual boards would give the four-year, degree-granting college maximum autonomy in the interest of rapid development to the status of a recognized institution of the state. Under this arrangement, the college can utilize the resources of the state's outstanding institutions in developing its programs.

Control

The recommendation that the control of Grand Rapids Junior College be vested in a separate Board of Control with a broader base of service is based on the fundamental principle of providing maximum post-high school educational opportunity to the youth of this eight-county area. The newly created board should make continuing, intensive studies of the technical and terminal needs of the area in order that the college would be rendering adequate services here.

It is the recommendation of this report that the newly established, four-year college be organized under the control of a separate Board of Control and a Board of Citizen Advisors.

The Board of Control of the new college should consist of ten members. They should serve a six-year term of office with five members being elected each three years. A ten-member board would provide for adequate coverage of the region and the state on the Board of Control. The length of term of office and the change of membership every five years would provide for the continuity which is necessary for the development of such an institution.

The Board of Citizen Advisors is recommended for this new college primarily as a means of assuring maximum support, throughout the state of Michigan, for this development. Clearly, the most important function of this board would be to advise with the Board of Control on matters pertaining to development and needs of the new college. Such a Board might consist of 24 members appointed by the college's Board of Control. The term of office should be eight years with one-half the board being elected every four years. This arrangement would provide continuity and it would provide for new personnel at times not necessarily simultaneous with the Board of Control.

Support

The new college should be supported by state appropriations in much the same manner that the other state-controlled institutions are. This would mean deriving about 75 or 80 percent of the general and educational budget from such appropriations, with the remainder coming from student fees. The tuition of the new college would be established by the Board of Control of the college, and, it is recommended that this be set at a level comparable to the tuition charges of the other state-controlled colleges and universities of the state.

The Grand Rapids Junior College, organized on the basis of several school districts, would derive its support from this broader base. Local revenues would provide a portion of the support; state appropriations, similar to those now received by the junior college, would provide another portion; and student fees would provide for the remainder.

The Cost

It must be emphasized that an attempt to make estimates of operating and capital outlay costs for the new college is a most difficult task. One point can, however, be made. That is that the per-student expenditures for general, educational, and capital purposes will be no more than that which would have to be made available for the expansion of our present colleges and universities in order to provide for these additional students. In fact, considering that the proposed college would primarily be a commuting institution, total capital outlay expenditures should be less than for residence-type institutions. Furthermore, as far as the individual student is concerned, for those attending on a commuting basis, the total cost of attendance would be considerably less than that required for residence students.

Considerations of financing the operations and capital outlay for the new college should be based on the assumption that land might be purchased for the college in 1961; instructional facilities should be completed by 1964 or 1965; and other facilities would be completed by 1968-70. Also, it should be assumed that enrollments will increase from a student body of about 2,500 in 1965 to about 8,000 or 10,000 in 1975.

At least 400 acres of suitable land should be purchased, located as suggested in the next section. A building, to house classrooms, faculty and administrative offices should be built in time for formal opening of classes in the fall of 1964 or 1965. This, of course, would include the construction of a library building, also. It is then envisioned that student center facilities would be built soon thereafter, and an auditorium and fine arts center would be planned for completion in 1968. Physical education and athletic facilities should be planned for completion by 1969-70.

The Director of the Study strongly urges that before plans progress too far along, assuming that the state and the eight-county area support the fulfillment of the need identified in this report, an architect and planning staff be employed to work with a committee of educational consultants in developing the plan for the New College.

An Alternative Proposal

The above recommendation regarding the organization and structure of the newly established institution of higher education in this area, designed to fulfill the need identified in this report, is not the only proposal worthy of consideration. As part of this report, an alternative proposal is made. The proposal, although not as highly preferred as the first, should be given due consideration.

It is recommended that, as an alternative method of providing for the higher education needs of the eight-county area, a state-supported, degree-granting institution be established which encompasses, at the outset, only the junior and senior years of undergraduate programs.

The freshman and sophomore years of the undergraduate programs would be provided by existing and to-be-established community and junior colleges in this area, including the cities of Grand Haven and Holland.

What has been said regarding the control and plans for a new four-year, degree-granting institution would hold, all or in part, for this alternative recommendation, except that: (1) expanded junior college facilities would have to be provided in the Grand Rapids and Muskegon areas, and (2) additional junior college facilities would have to be established in several cities of the eight-county area if the need cited previously is to be met adequately. In essence, then, the two-year junior colleges of the area would be the primary source of students for the new college.

Location of the New College

The attention given, in the preceding sections, to the provision of adequate educational services to the youth of this area would rather clearly imply that the decision for locating the New College would have to be based on such considerations. In other words, the site for the New College should be most readily accessible to the largest proportion of the college-age youth of the eight-county area. Considering this factor, and the developments of highway arteries in this area, the most logical location for the new college appears to be just west of the City of Grand Rapids. The location should be readily accessible to the metropolitan development of Grand Rapids, as well as to the population concentrations in Muskegon, Holland, and Grand Haven. The location should also provide for services to youth in a wide band, running north and south just west of Grand Rapids, and should not exclude the youth of the other adjacent counties either. It is recommended that the decision regarding a specific site be reached only after thorough discussion and investigation of the matter by the Legislative and Citizens Committees.

CHAPTER V

Summary, Conclusions, and Recommendations

The manifestation of increasing needs for higher education in the state of Michigan is not a phenomenon unique to our state. Nor is the concern as to how this need is to be met unique to the state of Michigan. Throughout our country, and the world, for that matter, nations have been recognizing the need for increasing and raising the level of education of their populations. Increased recognition is evident regarding the general social values associated with more widely available educational opportunities.

The state of Michigan is one of many states expressing concern about ways and means of providing adequate educational opportunity beyond the high school for an ever-increasing number of young people and adults seeking such education. Along with this general concern regarding adequate provisions for higher education in the state are manifested certain specific concerns regarding the nature of these provisions.

First, not only must the provisions be made for increasing numbers of youth seeking higher educational opportunity, but these opportunities must be provided so that they are appropriate to the abilities and interests of the students seeking the education. In other words, post-high school education programs, if they are to meet the needs of our youth, should be diverse enough to provide curricula appropriate to the abilities and interests of these students. This assumes, of course, that there is general agreement on the basic principle that educational opportunity should be provided for a maximum number of our citizens.

Second, if this opportunity, appropriate to the abilities and interests of college-age youth, is to be made available to a maximum number of them, these provisions should be made on an effective geographical basis. Studies show that, in general. most students attending a given college come from an area within 50-75 miles of the institution. Other studies show that proximity to an institution determines, or at least affects, the percentage of college-age youth who will attend college from any given area. These factors, then, indicate the need for making judgments regarding the geographical distribution of newly established colleges in the state of Michigan. Of course, not all programs of higher education can be given the same, wide geographical distribution. For example, it would seem rather evident that programs leading to the undergraduate degree, and programs providing technical and terminal education at the freshman and sophomore levels need to be given a much wider geographical distribution than would programs of graduate and professional study. For one thing, there are smaller number of individuals to be served in the latter; and, furthermore, programs at this level have been shown to be considerably more expensive than most undergraduate programs and, hence, require much more state-wide coordination and cooperation among the colleges and universities than do the undergraduate programs. The point is that the maximum utilization of the state's human and financial resources will require increasing cooperation and coordination of effort with most graduate and professional programs, if their level of excellence is to be retained in the future.

One other point should be given emphasis. The stress laid on excellence of graduate and professional programs is a stress that must be given to all undergraduate programs as well. A general principle might be that, in the state of Michigan, all of our colleges and universities must be provided adequate support in order that they may maintain undergraduate programs of equally high quality. Then, funds for graduate and professional programs would be appropriated to a limited number of our state-controlled institutions, especially for programs of teaching and research at the doctorate level.

Summary

This study has summarized and analyzed certain data on selected factors which are thought to be relevant in making a judgment regarding the need for additional facilities for higher education in the eight-county area consisting of the following counties: Allegan, Barry, Ionia, Kent, Montcalm, Muskegon, Newaygo, and Ottawa. Certain of these data are also presented for the state of Michigan as a whole.

Economy

Data on almost any business and economic factors for the state indicate a generally vigorous and prospering economy. The state has, of course, felt its share of the 1958 recession as well as the effects of the recent steel strike. By most economists, these are considered as temporary lapses in the upward economic trend of the country and the state.

A summary of economic data for the eight counties reveals considerable variation among these eight counties. On the several factors presented in this study, Kent, Muskegon, and Ottawa counties, generally in that order, manifest strengths proportional to their individual populations. The only exception is in the value of agricultural products, where six of the eight counties, excluding Kent and Muskegon, show relatively high standings. This, however, does not compensate for the much larger proportion of the value of production by manufacture in the eight-county area. The point to be made here is that, if additional facilities for higher education are needed, then these should be provided and financed with a broad enough base so that need rather than economic ability will be the main determiner.

Population

Data presented in this study on population trends indicate that the general population increase for the state of Michigan will be about 29.9 percent between 1957 and 1970, and about 28.0 percent for the eight counties as a group. It is clear, however, that the rate of population increase in the individual counties in this group will vary considerably from only 10.7 percent in Ionia county to about 36.8 percent in Ottawa county.

Of primary importance in determinations of need for higher educational programs and facilities will be the number of people seeking such a level of education. The number of individuals seeking a higher education will, of course, depend upon the number of youth of college-age, or of an age normally associated with college attendance. Although it is perfectly clear that the age span of youth in colleges and universities is being extended, in this study use has been made of the age-range typically used in such studies, namely, 18-21. It should also be pointed out that in making these projections of college-age youth, the factors of in-migration and out-migration have not been taken into consideration. This was done not because they are not considered to be important, but because the variation due to these factors is particularly difficult to predict.

Projections of college-age youth (18-21 year olds) were made for 1965, 1970, and for 1975. Such projections were made for the state of Michigan and for the eight-county area. The projections used in this study were made by using recorded births and applying existing insurance survival tables.

For the state of Michigan, these estimates yield projections of 520,705 college-age youth for 1965; 595,222 by 1970; and 709,259 by 1975. For the eight-county area these projections are 55,837 for 1965; 63,314 for 1970; and 72,500 for 1975.

College Enrollments

The most direct method of making estimates of college enrollments for the state of Michigan or for the eight-county area is to make some estimate of the percentage that college enrollments will be of the college-age youth at any given time. For example, in 1957, the total college enrollments in the state of Michigan were 39.4 percent of the total college-age population in the state. One might make several assumptions regarding this percentage. The most conservative, and probably the most unrealistic, assumption is that this percentage will not increase. Another assumption, and probably the more accurate, is that the percentage will increase at some rate similar to the increases of the past, and that at some later date it may well reach a plateau.

Using the above two assumptions, one obtains two estimates of college enrollments for the state: 205,157 and 228,589 for 1965; 234,517 and 267,849 for 1970; and 279,464 and 319,185 for 1975. For 1970 and 1975, the second of the two figures assumes that the percentage that college enrollments are of college-age youth will plateau at 45.0 percent.

For the eight-county area, assuming that either 30 percent or 40 percent of the college-age youth will attend, the following projections are obtained: 16,751 and 22,334 for 1965; 18,996 and 25,328 for 1970; and 21,750 and 29,000 for 1975.

It may well be that the assumption that at most 40 percent of the college-age youth will be attending college is much too conservative, if the data gathered for this survey can be used as a basis for drawing a general conclusion. Of 7,755 students who were asked to indicate their level of educational aspiration, over 56 percent indicated that they were "very certain" or "fairly certain" of going on to school beyond the high school. The responses of these students are also fairly well substantiated by the data gathered from their parents. Of the parents, 21 percent indicate their desire to send their son or daughter to technical or business training and over 54 percent would like to see their son or daughter go on through college or through college and obtain an advanced degree. A preliminary analysis of the 1959 high school graduates from the high schools of Grand Rapids indicates that between 40 and 50 percent are currently in some post-high school educational institution.

In summary, the projections made in this study would indicate that, compared with 1957, the number of college enrollees from the eight-county area will have doubled by 1970 and by 1975 the number will be two-and-one-half times as large as in 1957.

Level of Present Higher Education Service in Eight-County Area

An attempt was made to describe the level of present higher education service available to students in the eight-county area in terms of colleges located in the region as well as the percentage of college-age youth now attending college from these counties. Except for the three counties, Kent, Muskegon, and Ottawa, the percentages are low compared to other counties of the state of Michigan. It must be pointed out, however, that the colleges, both public and private, located in this area, have been rendering an increasing service to students seeking a higher education. This increased service has been offered to students from within Michigan and to students from out-of-state. The out-of-state services are of particular importance in two of the private colleges, while the two community colleges have rendered service mainly to students from the immediate area. Also of some significance is the fact that this increased service is indicated in the fact that the total enrollments of the eight-county colleges as a percentage of the total college enrollments in Michigan has risen during the past five years.

Computations made for this study indicate that by 1965 there may be 6,000 young people in the eight-county area seeking a higher education for whom there will not be a facility available. This conclusion is based on a comparison of the projected college enrollments from this region and the total enrollments envisioned by presently existing colleges and universities of the state as they plan to expand in the future. By 1970, this figure will still be at least 5,000.

Recommendations and Conclusions

On the basis of the data gathered and analyzed for this study, and consideration of some of the principles cited previously, the following recommendations and additional conclusions are made:

1. There exists the need for an additional facility to provide educational programs beyond the high school in this area.
2. Although the need appears to be apparent for a variety of programs and institutions, first priority consideration should be given to the implementation of plans for the establishment of a new, four-year, degree-granting college in this eight-county area. Specifically, the realization of such a college should be a fact by 1965. It seems reasonable to estimate the enrollments for the new college at 2,500 for 1965; 5,000 for 1970; and 8,000 to 10,000 by 1975.

   The other alternative to this recommendation was briefly presented in body of this report. Also suggested for consideration was the possibility of establishing a new degree-granting, state-supported college in this area with only the junior and senior years of college on its campus. This suggestion carries with it the necessity of extending present junior college facilities in Grand Rapids and Muskegon, and establishing new ones in other cities of the eight-county area.

3. The new college should be organized as an educational unit, under state control and with state support, with its own board of trustees. It is suggested that there be at least nine members on the board, with terms of office so rotated as to provide maximum continuity of office.
4. There should be established, in addition to the Board of Trustees of the college, a Board of Citizen Advisors, in order that maximum assurance can be given to the successful development of the institution. The members of this Board should be selected by the elected Board of Trustees, with a term of office at least six years in length.
5. It is recommended that tuition charges at the new college be comparable to the charges in our other state-controlled colleges.
6. It is recommended that the educational program of the new college be developed with a strong undergraduate, liberal arts emphasis. In addition, the program should offer work in carefully identified majors in liberal arts, science, mathematics, languages, fine arts, teaching, business administration, engineering, and international programs. It is further recommended that the development of the curriculum of the new college be carried out with full advice and support of the educational leaders of the state's colleges and universities.

The Director of the Study is making the suggestion that, in the interest of an adequate and effective program of higher education, the three state universities now offering extension programs in this area give consideration to the establishment of a cooperative, continuing education center. Such a center, which might actually be located on a campus with the new college, would provide graduate and adult education programs for this area.

7. It is recommended that the development of the new college should provide a particular emphasis on general, cultural programs available to the entire area being served.

8. It is recommended that at least 400 acres of land be provided for the college. The recommendation is also made that a classroom and administration building be completed by 1965. Also included here should be a library facility. Then, by 1968 and 1970 additional plans to be added would include a student center, an auditorium and fine arts center, and physical education and athletic facilities. It is strongly recommended that consideration of building plans be given a sufficient amount of time, and that educational and architectural planners be involved at every stage of the planning.

9. It is the recommendation of the study that the new college be located so that it will provide the needed services to a maximum number of youth and adults. It is recommended that the new college be located just west of the city of Grand Rapids.

10. The establishment of the proposed new college will have implications for the educational programs of the local colleges, especially the junior and community colleges in Grand Rapids and Muskegon. It is the recommendation of this study that the program of Grand Rapids Junior College be re-aligned to conform more closely with the objectives and purposes generally associated with community colleges. Its program, and that of Muskegon Community College, should provide for the technical-terminal program needs indicated in the data of this survey by students and parents. Not to be overlooked, however, is the continuing need for the provision of certain general education programs to accompany the technical-terminal programs.

11. Therefore, it is recommended that the area of service of Grand Rapids Junior College should be extended to include several additional school districts. This will provide a broader base of financial support and a broader area of service.

12. It is further recommended that Grand Rapids Junior College be then re-established under a separate board of control, with an elected membership from the area of its financial support.

13. Finally, it is recommended that the Legislative and Citizens Committees now proceed to develop detailed plans for the New College in the eight-county area.

APPENDIX

Table A-1. Sex of Participating High School Students in the Grand Rapids Area

Sex of Students	Number	Percent
Male	3,832	49.4%
Female	3,862	49.8%
No Response	63	.8%
Total	7,757	100.0%

Table A-2. Present Course of Study of 10th and 12th Grade Pupils Queried:

Response	10th & 12th Grade Pupils	
	Number	Percent
College Preparatory	3,544	45.69
General	2,074	26.74
Commercial (Business)	1,467	18.91
Vocational	341	4.39
Other	188	2.42
No Response	141	1.81
Total	7,755	99.96 *

* In most tables, the percentages do not add to 100, due to rounding error.

Table A-3. Students' Vocational Plans

Question: If you plan to attend college, what vocation do you plan to enter after you complete your education?

Vocations	10th & 12th Grade Students	% of Total N=5,780
Undecided	1,089	18.8
Accounting	107	1.8
Agriculture	146	2.5
Architecture	79	1.3
Armed Services	134	2.3
Art, or Art & Crafts	109	1.8
Auto-Airplane Mechanic	161	2.7
Banking	13	.2
Beautician-Barber	211	3.6
Building Trades	37	.6
Business Administration	202	3.4
Chemistry	62	1.0
Community Service	4	.06
Dental Technology	15	.2
Dentistry	42	.7
Drafting	83	1.4
Electronics	121	2.0
Engineering	399	6.9
Government Service	52	.8
Homemaking	43	.7
Industrial Foremen	5	.06
Journalism	48	.8
Lab Technician	36	.6
Law	77	1.3
Medical Technology	43	.8
Medicine	112	1.9
Metal Trades	49	.8
Ministry - Rel. Educ.	90	1.5
Music	69	1.1
Nursing	411	7.1
Pharmacy	49	.8
Radio - TV	36	.6
Retailing & Whsl.	24	.4
Salesmanship	21	.4
Science Research	65	1.1
Secretarial	423	7.3
Social Work	59	1.0
Teaching	712	12.3
Vet Medicine	21	.4
Other	321	5.5
Total:	5,780	

Based on 5,780 responses.

Table A-4. Type of College Program Expected for Students by Parents

Question: If you feel your child might attend such a college or university, what type of educational program would you expect him to take?

Vocations	Parents of 10th & 12th Graders No.	Parents of 10th & 12th Graders %	Parents of 2nd Graders No.	Parents of 2nd Graders %	Total	% of Total
Undecided	1,220	27.3	2,639	62.8	3,859	44.5
Accounting	102	2.2	31	.7	133	1.5
Agriculture	126	2.8	38	.9	164	1.8
Architecture	64	1.4	21	.5	85	.9
Armed Services	60	1.3	16	.3	76	.8
Art, or Art & Crafts	90	2.0	62	1.4	152	1.7
Auto-Airplane Mechanic	116	2.6	23	.5	139	1.6
Banking	14	.3	6	.1	20	.2
Beautician-Barber	141	3.1	32	.7	173	1.9
Building Trades	28	.6	28	.6	56	.6
Business Administration	222	4.9	100	2.3	322	3.7
Chemistry	44	.9	18	.4	62	.7
Community Service	7	.1	3	.07	10	.1
Dental Technology	14	.3	12	.2	26	.3
Dentistry	31	.6	26	.6	57	.6
Drafting	55	1.2	10	.2	65	.7
Electronics	91	2.0	59	1.4	150	1.7
Engineering	313	7.0	187	4.4	500	5.7
Government Service	28	.6	6	.1	34	.3
Homemaking	47	.9	40	.9	87	1.0
Industrial Foremen	6	.1	1	.02	7	.08
Journalism	30	.6	8	.1	38	.4
Lab Technician	31	.6	12	.2	43	.4
Law	40	.8	20	.4	60	.6
Medical Technology	42	.8	15	.3	57	.6
Medicine	63	1.4	81	1.9	144	1.6
Metal Trades	50	1.1	5	.09	55	.6
Ministry - Rel. Educ.	60	1.3	58	1.3	118	1.3
Music	51	1.1	24	.6	75	.8
Nursing	266	5.9	218	5.1	484	5.5
Pharmacy	29	.6	9	.1	38	.4
Radio - TV	17	.3	8	.1	25	.3
Retailing & Whsl. Trades	14	.3	4	.08	18	.2
Salesmanship	12	.2	5	.09	17	.2
Science Research	59	1.3	56	1.3	115	1.3
Secretarial	301	6.7	67	1.5	368	4.2
Social Work	40	.8	9	.1	49	.5
Teaching	447	10.0	201	4.7	648	7.4
Vet Medicine	14	.3	14	.3	28	.3
Other	68	1.5	43	1.0	111	1.2
Total	4,453		4,200		8,653	

Table A-5. Comparison of Sex of High School Pupils Queried and Planning for College

Planning for College	Sex of Respondents				Total	
	Male		Female			
	No.	%	No.	%	No.	%
No Intention of Going	869	22.68	1,082	28.01	1,951	25.36
Have Been Accepted	423	11.04	486	12.58	909	11.81
Have Made Application	224	5.84	193	4.99	417	5.42
Have Rec'd or Written for Information	235	6.13	345	8.93	580	7.53
Have Established Contact with a College Representative	91	2.37	78	2.01	169	2.19
May Go But No Plans Made	1,896	49.49	1,561	40.41	3,457	44.93
No Response	94	2.45	117	3.02	211	2.74
Total	3,831	100.00	3,862	99.95	7,693	99.98

Table A-6. College Attendance of Siblings of 10th and 12th Grade Pupils Now or in Past

Question: Do you have one or more older brothers or sisters now in college, or in the past?

Response	Number	Percent
Yes	1,669	21.52
No	5,750	74.14
Don't Know	53	.68
No Response	283	3.64
Total	7,755	99.98

Table A-7. Present Course of Study of 10th and 12th Grade Pupils

Present Course of Study	Grade in School				Total	
	10th Grade		12th Grade			
	No.	%	No.	%	No.	%
College Preparatory	2,132	44.90	1,405	47.77	3,537	46.00
General	1,299	27.35	771	26.21	2,070	26.92
Commercial (Business)	871	18.34	590	20.06	1,461	19.00
Vocational	233	4.90	104	3.53	337	4.38
Other	143	3.01	44	1.49	187	2.43
No Response	70	1.47	27	.91	97	1.26
Total	4,748	99.97	2,941	99.97	7,689	99.99

Table A-8. Educational Aspirations of 10th and 12th Graders Queried

Educational Aspiration	Grade in School				Total	
	10th Graders		12th Graders			
	No.	%	No.	%	No.	%
Through High School	1,684	35.46	883	30.02	2,567	33.38
High School plus Technical or Business Training	832	17.52	553	18.80	1,385	18.01
Through College	1,564	32.94	1,020	34.68	2,584	33.60
College plus Advanced Degree	407	8.57	344	11.69	751	9.76
Other	105	2.21	58	1.97	163	2.11
No Response	156	3.28	83	2.82	239	3.10
Total	4,748	99.98	2,941	99.98	7,689	99.96

Table A-9. Plans of 10th and 12th Graders for College Attendance

Plans for College Attendance	Grade in High School				Total	
	10th Grade		12th Grade			
	No.	%	No.	%	No.	%
No Intention of Attending	1,220	25.69	730	24.82	1,950	25.36
Have Been Accepted	5	.10	904	30.73	909	11.82
Have Made Application	14	.29	401	13.63	415	5.39
Have Rec'd or Requested Information	401	8.44	177	6.01	578	7.51
Have Made Contact with a Representative	113	2.37	56	1.90	169	2.19
May Go but Made No Plans	2,853	60.08	608	20.67	3,461	45.01
No Response	142	2.99	65	2.21	207	2.69
Total	4,748	99.96	2,941	99.97	7,689	99.97

Table A-10. Certainty of Entering Post-High School Specialized Training or College of 10th and 12th Graders Queried

Certainty of Entering Post-High School Specialized Training	Grade in High School				Totals	
	10th Grade		12th Grade		Number	Percent
	No.	%	No.	%		
Very Certain	1119	23.56	1267	43.08	2386	31.03
Fairly Certain	1447	30.47	531	18.05	1978	25.72
No Intention Of	1010	21.27	592	20.12	1602	20.83
Don't Know	1155	24.32	540	18.36	1695	22.04
No Response	17	.35	11	.37	28	.36
Total	4748	99.97	2941	99.98	7689	99.98

Table A-11. Comparison of Sex of High School Pupils Queried and Present Course of Study in High School

Present Course of Study	Sex of Respondents					
	Male		Female		Total	
	No.	%	No.	%	No.	%
College Preparatory	1865	48.93	1674	43.34	3539	45.99
General	1351	35.25	717	18.56	2068	26.87
Commercial (Business)	158	4.12	1305	33.79	1463	19.01
Vocational	275	7.17	64	1.65	339	4.40
Other	127	3.31	60	1.55	187	2.43
No Response	56	1.46	42	1.08	98	1.27
Total	3832	100.24	3862	99.97	7694	99.97

Table A-12. Comparison of Sex of High School Pupils Queried and Certainty of Attending a New Four-Year, State-Supported College

Certainty of Attending New Four-Year College	Sex of Respondents					
	Male		Female		Total	
	No.	%	No.	%	No.	%
Very Certain to Attend	392	10.22	366	9.47	758	9.85
Probably Attend	857	22.36	721	18.66	1578	20.50
Uncertain	1389	36.24	1370	35.47	2759	35.85
Probably Not Attend	570	14.87	698	18.07	1268	16.48
Certain Not to Attend	469	12.23	590	15.27	1059	13.76
No Response	155	4.04	117	3.02	272	3.53
Total	3832	99.96	3862	99.96	7694	99.97

Table A-13. Comparison of Sex of High School Pupils Queried and Certainty of Attending an Area Community Junior College

Certainty of Attending a Community Junior College	Sex of Respondents				Total	
	Male		Female			
	No.	%	No.	%	No.	%
Very Certain to Attend	441	11.50	462	11.96	903	11.73
Probably Attend	568	14.82	502	12.99	1,070	13.90
Uncertain	1,280	33.40	1,181	30.58	2,461	31.98
Probably Not Attend	777	20.27	824	21.33	1,601	20.80
Certain Not to Attend	616	16.07	768	19.88	1,384	17.98
No Response	150	3.91	125	3.23	275	3.57
Total	3,832	99.97	3,862	99.97	7,694	99.96

Table A-14. 10th and 12th Grade Pupils' Certainty of Attending Area Community Junior Colleges

Certainty of Attending an Area Community Jr. College	Grade in High School				Total	
	10th Grade		12th Grade			
	No.	%	No.	%	No.	%
Very Certain to Attend	369	7.77	531	18.05	900	11.70
Probably Attend	754	15.88	316	10.74	1,070	13.91
Uncertain	1,722	36.26	744	25.29	2,466	32.07
Probably Not Attend	957	20.15	639	21.72	1,596	20.75
Certain Not to Attend	758	15.96	625	21.25	1,383	17.98
No Response	188	3.95	86	2.92	274	3.56
Total	4,748	99.97	2,941	99.97	7,689	99.97

Table A-15. Formal Training of Heads of Households

Response	Parents of 10th & 12th Grade Husband		Parents of 10th & 12th Grade Wife		Parents of 2nd Grade Husband		Parents of 2nd Grade Wife		Totals Husbands		Totals Wives		Total All Husbands & Wives	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Did Not Complete 8th Grade	287	5.73	142	2.83	202	4.43	106	2.32	489	5.11	248	2.59	737	3.85
Completed 8th Grade Only	996	19.91	764	15.27	496	10.88	321	7.04	1492	15.60	1085	11.34	2577	13.47
Some High School	1151	23.01	1214	24.27	974	21.36	886	19.43	2125	22.22	2100	21.96	4225	22.09
Completed High School	1277	25.52	1718	34.35	1330	29.17	1898	41.64	2607	27.26	3616	37.82	6223	32.54
Some College	480	9.59	472	9.43	555	12.17	585	12.83	1035	10.82	1057	11.05	2092	10.94
Completed College	331	6.61	291	5.81	485	10.64	312	6.84	816	8.53	603	6.30	1419	7.42
Professional or Graduate School	203	4.05	156	3.11	266	5.83	155	3.40	469	4.90	311	3.25	780	4.07
No Response	277	5.53	245	4.89	250	5.48	295	6.47	527	5.51	540	5.64	1067	5.58
Totals	5002	99.95	5002	99.96	4558	99.96	4558	99.97	9560	99.95	9560	99.95	19120	99.96

Table A-16. Attitudes of Participating Parents Toward College Attendance

Question: In general, who do you feel should be permitted to go to college?

	No. and % of Participating Parents of:				Total	
	2nd Grade Pupils		10 & 12 Grade Pupils			
	No.	%	No.	%	No.	%
Those with Superior Ability	142	3.1	147	2.9	-	3.0
Those with Ability Who Have the Financial Means	285	6.2	275	5.5	-	5.9
All Who Have Ability to Profit from, Regardless of Means	3,916	85.9	4,430	88.5	-	87.4
Other	31	.7	26	.5	-	.6
Total Responses	4,558		5,002		9,560	
No Response	184		124		308	

Table A-17. Parent's Plans For Children's Post-High School Education
(Based on 9,561 Questionnaries of Parents of 2nd, 10th & 12th Grade Pupils)

Response	Parents of 10 & 12 Graders		Parents of 2nd Graders		Total	
	No.	%	No.	%	No.	%
No Plans At Present	931	18.61	1402	30.75	2333	24.40
Leaving It Up To Child	1359	27.16	671	14.72	2030	21.23
A Definite Education Savings Program	575	11.49	847	18.58	1422	14.87
Help Child Work His Way	1855	37.08	1461	32.05	3316	34.68
Expect Child To Win A Scholarship	63	1.25	23	.50	86	.89
Expect Child To Be Trained At Government Expense	54	1.07	10	.21	64	.66
Other	32	.63	19	.41	51	.53
No Response	133	2.65	125	2.74	258	2.69
Total	5002	99.94	4558	99.96	9561	99.95

Table A-18. Additional Educational Aspirations of Heads of Households

Response	Parents - 10 & 12 Graders				Parents - 2nd Graders				Totals			
	Husbands		Wives		Husbands		Wives		Husbands		Wives	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
None	2225	44.48	2218	44.34	1302	28.56	1297	28.45	3527	36.89	3515	36.76
Work on College Degree	115	2.29	169	3.37	162	3.23	225	4.93	277	2.89	394	4.12
Courses For Job and Status Improvement	961	19.21	373	7.45	1372	30.10	277	6.07	2333	24.40	650	6.79
Courses For Home Improvement	44	.87	477	9.53	53	1.16	636	13.95	97	1.01	1113	11.64
Courses For Self-Broadening	443	8.85	655	13.09	469	10.28	819	17.96	912	9.53	1474	15.41
Other	46	.91	58	1.15	87	1.90	87	1.90	133	1.39	145	1.51
No Response	1168	23.35	1052	21.03	1113	24.41	1217	26.70	2281	23.85	2269	23.73
Total	5002	99.96	5002	99.96	4558	99.64	4558	99.96	9560	99.96	9560	99.96

Table A-19. Parent's Attitude re: Certainty of Children Attending One of Area's Accredited Community or Junior Colleges

Response	Parents of 10 & 12 Graders		Parents of 2nd Graders		Total	
	No.	%	No.	%	No.	%
Very Certain to Attend	759	15.17	566	12.41	1325	13.85
Probably Attend	1192	23.83	1560	34.22	2752	28.78
Uncertain	1862	37.22	1879	41.22	3741	39.12
Probably Not Attend	674	13.47	312	6.84	986	10.31
Certain Not to Attend	351	7.01	167	1.46	418	4.37
No Response	164	3.27	174	3.81	338	3.53
Total	5002	99.97	4558	99.96	9561	9996

Table A-20. 10th and 12th Grade Pupils' Certainty of Attending a New Four-Year, State-Supported College

Certainty of Attending New College	Grade in High School				Total	
	10th Grade		12th Grade			
	No.	%	No.	%	No.	%
Very Certain to Attend	410	8.63	349	11.86	759	9.87
Probably Attend	1,003	21.12	572	19.44	1,575	20.48
Uncertain	1,782	37.53	982	33.39	2,764	35.94
Probably Not Attend	737	15.52	528	17.95	1,265	16.45
Certain Not to Attend	640	13.47	417	14.17	1,057	13.74
No Response	176	3.70	93	3.16	269	2.71
Total	4,748	99.97	2,941	99.97	7,689	99.19

Table A-21. Certainty of Students Attendance at a New Four-Year, State-Supported College as Perceived by Parents.
(Based on 9,560 Questionnaires of Parents of 2nd, 10th and 12th Grade Pupils)

Response	Parents of 10 & 12 Graders		Parents of 2nd Graders		Total	
	No.	%	No.	%	No.	%
Very Certain to Attend	775	15.49	688	15.09	1463	15.30
Probably Attend	1470	29.39	1740	38.17	3210	33.57
Uncertain	1794	35.87	1717	37.67	3511	36.72
Probably Not Attend	593	11.85	200	4.38	793	8.29
Certain Not to Attend	288	5.75	41	.89	329	3.44
No Response	82	1.63	172	3.77	254	2.66
Total	5002	99.98	4558	99.97	9560	99.98

Table A-22. Comparison of Parents (10th & 12th Grade) certainty That Children Will Attend an Established Area Junior College and Distance of Residence From Grand Rapids

Distance Residing From Grand Rapids	Parent's Certainty of Children's Attendance													
	Very Certain to Attend		Probably Attend		Uncertain		Probably Not Attend		Certain Not to Attend		No Response		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 4 miles	385	55.47	446	39.46	508	28.33	198	30.46	94	28.14	15	33.33	1646	35.42
5 - 9 miles	66	9.51	120	10.61	148	8.25	55	8.46	22	3.38	3	6.66	414	8.91
10 - 19 miles	91	13.11	141	12.47	235	13.10	71	10.92	36	10.77	5	11.11	579	12.46
20 - 30 miles	84	12.10	218	19.29	431	24.03	136	20.92	86	25.74	7	15.55	962	20.70
30 miles +	68	9.79	205	18.14	471	26.26	190	29.23	96	28.74	15	33.33	1045	22.49
Total	694	99.98	1130	99.97	1793	99.97	650	99.99	334	96.77	45	99.98	4646	99.98

Table A-23. Comparison of 10th and 12th Grade Pupils' Educational Aspirations and Formal Training of Parents.

Educ.Aspirations of 10th & 12th Grade Pupils		Formal Training of Parents of 10th & 12th Grade Pupils							
		Completed 8th Grade or Less	Some High School	Completed High School	Some College	Completed College	Some or Completed Professional or Graduate School	No Response	Total
Through High School	N	637	722	859	146	78	47	67	2578
	%	24.70	28.00	33.32	5.66	3.02	1.81	2.59	34.50
High School Plus Specialized, Technical or Business Training	N	226	351	495	120	86	71	31	1389
	%	16.27	25.26	35.63	8.63	6.19	5.10	2.23	18.59
Through College	N	211	382	899	372	467	219	28	2589
	%	8.14	14.76	34.72	14.36	18.03	8.45	1.08	34.65
College Plus Advanced Degree	N	43	80	229	95	171	125	8	753
	%	5.71	10.62	30.41	12.61	22.70	16.60	1.06	10.08
Other, No Response, Etc.	N	28	34	63	11	10	11	4	163
	%	17.18	20.85	38.65	6.74	6.13	6.75	2.45	2.18
Total	N	1145	1569	2545	744	1556	473	138	7472
	%	15.32	20.99	34.06	9.95	20.82	6.33	1.84	100.00

Table A- Comparison of Training of Fathers of 10th and 12th Grade Pupils With Parental Aspirations for Children's Education.

Formal Training of Fathers of 10 & 12 Grade pupils	Aspirations of Parents for Children's Education													
	Through High School		High School Plus Specializied Training, Tech., or Business		Through College		College and Advanced Degree		Other		No Response		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Number	Per Cent
Did not Complete 8th Grade	127	10.61	78	6.97	65	3.01	9	2.36	0	-	8	6.40	287	5.73
Completed 8th Grade Only	385	32.19	248	22.18	282	13.09	41	10.78	7	23.33	34	27.20	997	19.92
Some High School	340	28.42	314	28.08	409	18.98	50	13.15	9	30.00	29	23.20	1151	23.00
Completed High School	217	18.14	298	26.65	644	29.89	85	22.36	7	23.33	26	20.80	1277	25.53
Some College	22	1.83	83	7.42	301	13.97	66	17.36	1	3.33	7	5.60	480	9.59
Completed College	9	.75	17	1.52	246	11.42	55	14.47	1	3.33	3	2.40	331	6.61
Professional or Graduate School	10	.83	14	1.25	124	5.75	53	13.94	0	-	2	1.60	203	4.05
No Response	86	7.19	66	5.90	83	3.85	21	5.52	5	16.66	16	12.80	277	5.53
Total	1196		1118		2154		380		30		125		5003	

Table A-25. Comparison of Parent's Certainty That Children Will Attend a New Four-Year College in Grand Rapids Area and Distance of Residence From Grand Rapids (Based on a Total of 4,798 Responses)

Distance From Grand Rapids	Parents Expressed Certainty That Children Will Attend New Four-Year College													
	Very Certain to Attend		Probably Attend		Uncertain		Probably Not Attend		Certain Not to Attend		No Response		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 4 miles	371	51.59	555	39.44	490	28.50	173	30.51	79	28.62	33	30.00	1701	35.45
5 - 9 miles	63	8.76	152	10.80	137	7.96	51	8.99	13	4.71	8	7.27	424	8.83
10 - 19 miles	108	15.02	184	13.07	212	12.33	55	9.70	25	9.05	17	15.45	601	12.52
20 - 30 miles	97	13.49	276	19.61	400	23.26	123	21.69	68	24.63	35	31.81	999	20.82
30 miles +	80	11.12	240	17.05	480	27.92	165	29.10	91	32.97	17	15.45	1073	22.36
Totals	719	99.98	1407	99.97	1719	99.97	567	99.99	276	99.98	110	99.98	4798	99.98